

Iowa Department of Natural Resources Title V Operating Permit

Name of Permitted Facility: Cargill, Inc. – Fort Dodge
Facility Location: 1950 Harvest Avenue, Fort Dodge, Iowa 50501
Air Quality Operating Permit Number: 17-TV-003-M001
Expiration Date: November 26, 2022
Permit Renewal Application Deadline: May 26, 2022

EIQ Number: 92-6615
Facility File Number: 94-01-080

Responsible Official

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Title: Plant Manager
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This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Lori Hanson, Supervisor of Air Operating Permits Section

Date

Table of Contents

I. Facility Description and Equipment List	4
II. Plant - Wide Conditions.....	10
III. Emission Point Specific Conditions	14
IV. General Conditions.....	125
G1. Duty to Comply	
G2. Permit Expiration	
G3. Certification Requirement for Title V Related Documents	
G4. Annual Compliance Certification	
G5. Semi-Annual Monitoring Report	
G6. Annual Fee	
G7. Inspection of Premises, Records, Equipment, Methods and Discharges	
G8. Duty to Provide Information	
G9. General Maintenance and Repair Duties	
G10. Recordkeeping Requirements for Compliance Monitoring	
G11. Evidence used in establishing that a violation has or is occurring.	
G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification	
G13. Hazardous Release	
G14. Excess Emissions and Excess Emissions Reporting Requirements	
G15. Permit Deviation Reporting Requirements	
G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations	
G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification	
G18. Duty to Modify a Title V Permit	
G19. Duty to Obtain Construction Permits	
G20. Asbestos	
G21. Open Burning	
G22. Acid Rain (Title IV) Emissions Allowances	
G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements	
G24. Permit Reopenings	
G25. Permit Shield	
G26. Severability	
G27. Property Rights	
G28. Transferability	
G29. Disclaimer	
G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification	
G31. Prevention of Air Pollution Emergency Episodes	
G32. Contacts List	
V. Appendix A:	139

Abbreviations

acfm.....	actual cubic feet per minute
bu.....	bushels
CFR.....	Code of Federal Regulation
CE	control equipment
CEM.....	continuous emission monitor
°F	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP	emission point
EU	emission unit
gr/dscf	grains per dry standard cubic foot
IAC.....	Iowa Administrative Code
DNR.....	Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NESHAP	national emission standards for hazardous air pollutants
NAICS.....	North American Industry Classification System
NSPS	new source performance standard
ppmv	parts per million by volume
lb/hr	pounds per hour
lb/MMBtu	pounds per million British thermal units
SCC	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC	Standard Industrial Classification
TPY	tons per year
USEPA.....	United States Environmental Protection Agency

Pollutants

PM.....	particulate matter
PM ₁₀	particulate matter 10 microns or less in diameter
PM _{2.5}	particulate matter 2.5 microns or less in diameter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC	volatile organic compound
CO	carbon monoxide
CO _{2e}	carbon dioxide equivalent
HAP.....	hazardous air pollutant
TOC.....	total organic compounds

I. Facility Description and Equipment List

Facility Name: Cargill, Inc. – Fort Dodge

Permit Number: 17-TV-003-M001

Facility Description: Wet Corn Milling (SIC 2046)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP-02	EU-02	Corn Receiving Truck Dump No. 1	07-A-822-P8
	EU-02a	Corn Receiving Truck Dump No. 2	
	EU-04a	Corn Dump Receiving Collection Drag Conveyor	
	EU-04b	Corn Receiving Leg Elevator	
	EU-04c	Corn Storage Drag Conveyor	
	EU-04d	Clean Corn Belt	
	EU-04e	Overflow Bin	
	EU-04f	Clean Corn Bucket Elevator	
	EU-04g	Corn Storage Belt Conveyor	
	EU-04h	Corn Silo No. 1	
	EU-04j	Corn Silo No. 2	
	EU-04k	Corn Silo No. 3	
	EU-04m	Corn Cleaner	
	EU-04n	Steep Fill Drag	
	EU-04p	Corn Reclaim Drag No. 1	
	EU-04q	Corn Reclaim Drag No. 2	
	EU-04r	Corn Reclaim Drag No. 3	
	EU-10	Corn Dust Bin	
EP-11	EU-11	Dry Ingredients Storage Bin	07-A-832-P5
EP-12	EU-12a	Pneumatic Cracks Line	12-A-150-P5
EP-13	EU-13	Dry Ingredients Storage Bin	12-A-151-P2
EP-19	EU-19a	Stripping Column	07-A-838-P8
	EU-19b	Rectifying Column	
	EU-19c	Pre-fermenter B	
	EU-19d	Pre-fermenter	
	EU-19e	Fermenter No. 1	
	EU-19f	Fermenter No. 2	
	EU-19g	Fermenter No. 3	
	EU-19h	Fermenter No. 4	
	EU-19i	Beerwell	
	EU-19k	Molecular Sieve Unit	
	EU-19l	MSU Evaporator	
	EU-19m	Rectifying Column Evaporator	
	EU-19n	Beer Still No. 1	
	EU-19o	Degas Column	
EP-22	EU-22	Alcohol Rework Tank (internal floating roof)	07-A-839-P5

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP-24	EU-24	Corrosion Inhibitor Tank	07-A-841-P7
EP-25	EU-25	Denaturant Storage Tank (internal floating roof)	07-A-842-P4
EP-26	EU-26	Ethanol Storage Tank No. 1 (internal floating roof)	07-A-843-P4
EP-27	EU-27	Ethanol Storage Tank No. 2 (internal floating roof)	07-A-844-P4
EP-29	EU-29	Ethanol Rail Loadout System	07-A-846-P3
EP-30	EU-30a	Gluten Meal Dryer	07-A-847-P9
	EU-30b	Gluten Meal Dryer Process Heater	
	EU-63a	Evaporator Vacuum Pumps	
	EU-07a	Corn Hopper	
	EU-07b	1 st Grind Tank	
	EU-07c	5 Steep Tanks	
	EU-07g	SO2 Solution Absorption Column	
	EU-07h	Light Steepwater Tank	
	EU-07i	Steephouse Process Water Tank	
	EU-07j	5 th Stage Sweet Fiber Wash Tank	
	EU-07m	Mill Stream Feed Tank	
	EU-07n	Clarifier Overflow Tanks	
	EU-07o	2 nd Grind Tank	
	EU-07p	3 rd Grind Tank	
	EU-07q	Fiber Wash Feed Tank	
	EU-07r	Millhouse Overflow Tank	
	EU-07s	4 th Stage Starchy Fiber Wash Tank	
	EU-07t	Clarifier Feed Tank	
	EU-07u	Fiber Dewatering Operations	
	EU-07v	Heavy Gluten Tank	
	EU-07w	Heavy Gluten Swing Tank	
	EU-07x	Process Water Tank	
	EU-07y	Primary Feed Tank	
	EU-07z	Gluten Thickening Feed Tank	
	EU-07aa	Starch Wash Feed Tank	
	EU-07bb	Starch Wash Water Tank	
	EU-07cc	Germ Filtrate Tank	
	EU-07ee	Gluten Dewatering Operations	
	EU-35c	Bunker Dump Drag	
	EU-07ff	Gluten Recycle Screw	
	EU-07ii	Steep Batch Tank No. 1	
	EU-07jj	Steep Batch Tank No. 2	
	EU-07kk	Starch Fiber Slurry Tank	
	EU-07mm	Heavy Steep Water Surge Tank	
	EU-07nn	Solids Recovery Tank	
	EU-07pp	Gluten Cloth Wash Tank	
EP-33	EU-33	Gluten Negative Convey/Cooler	07-A-849-P6

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP-37	EU-37	Germ Silo	07-A-852-P5
	EU-40a	Germ Bin Discharge Screw	
	EU-40b	Germ Loadout S-Path Drag	
	EU-40c	Germ Loadout Screw	
	EU-40d	Germ Truck Loadout	
	EU-41a	Gluten Bin Discharge Screw	
	EU-41b	Gluten Loadout S-Path Drag	
	EU-41c	Gluten Loadout Screw	
EP-38	EU-38	Gluten Storage Bin	07-A-853-P5
EP-43	EU-35a	Fiber Cyclone	07-A-857-P6
	EU-43bb	Fiber Dryer No. 1 Feed Drag/Product Condensers	
	EU-58	Steam Heated Germ Dryer No. 1	
	EU-58b	Germ Cooler	
	EU-58c	Germ Dryer No. 1 Exhaust Cyclone	
EP-47	EU-47	Natural Gas Fired Boiler	07-A-861-P5
	EU-60	Process Heater No. 1	
EP-49	EU-49	HCl Storage Tanks No. 1 & 2	07-A-862-P5
EP-51	EU-51	Salt Silo	07-A-864-P3
EP-52	EU-52	Cooling Tower Cell No. 1	07-A-865-P4
EP-53	EU-53	Cooling Tower Cell No. 2	07-A-866-P4
EP-54	EU-54	Cooling Tower Cell No. 3	07-A-867-P4
EP-55	EU-55	Cooling Tower Cell No. 4	07-A-868-P5
EP-56	EU-56	Emergency Generator No. 1	07-A-869-P5
EP-57	EU-57	Fire Water Pump Diesel Engine	07-A-870-P6
EP-63	EU-63	Emergency Generator No. 2	08-A-454-P4
EP-81	EU-81	Cracked Corn Receiver	12-A-152-P1
EP-82	EU-82	Dry Ingredients Receiver	12-A-153-P1
EP-83	EU-83	Dry Ingredients Hopper	12-A-154-P2
EP-84	EU-84	Dry Ingredients Hopper #2	12-A-155-P3
EP-85	EU-85	Dry Ingredient Unload and S-Path Drag	12-A-156-P2
EP-87	EU-87	Fiber Receiver	12-A-157-P1
EP-88	EU-88	Natural Gas Fired Boiler	12-A-158-P3
	EU-89	Natural Gas Fired Boiler	
EP-90	EU-90	Dry Bran Bunker	12-A-159-P1
EP-91	EU-91	Germ Truck Loadout	12-A-160-P1
EP-96	EU-96	Dry Ingredients Storage Bin	15-A-328-P1
FE-01	FE-01	Plant Haul Roads	07-A-873-P4

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
FE-02	FE-02	Equalization Tank No. 1	07-A-874-P3
	FE-03	Equalization Tank No. 2	
	FE-04	Aeration Basin No. 1	
	FE-05a	Anoxic Tank	
	FE-05b	Post Anoxic Tank	
	FR-05c	Open Channel	
	FE-05d	Membrane Tank No. 1	
	FE-05e	Membrane Tank No. 2	
	FE-05f	Membrane Tank No. 3	
	FE-06	Clarifier	
FE-08	FE-08	Ethanol Operations Fugitive	07-A-872-P2

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU-960a	Gasoline Tank (4,000 gallon)
EU-960b	Diesel Tank (4,000 gallon)
EU-961	Diesel Tank for Fire Pump (515 gallon)
EU-999a	Boiler Building Heater (5.445 MMBtu/hr)
EU-999b	Boiler Building Heater (5.445 MMBtu/hr)
EU-998a	Biomass Press Building Heater #1 (0.15 MMBtu/hr)
EU-998b	Biomass Press Building Heater #2 (0.15 MMBtu/hr)
EU-997	Heat Fermentation Make Up Air (1.875 MMBtu/hr)
EU-996	Refinery Heater (6.8 MMBtu/hr)
EU-995a	Warehouse Heater #1 (0.15 MMBtu/hr)
EU-995b	Warehouse Heater #2 (0.15 MMBtu/hr)
EU-995c	Warehouse Heater #3 (0.15 MMBtu/hr)
EU-995d	Warehouse Heater #4 (0.15 MMBtu/hr)
EU-995e	Maintenance Shop Heater #1 (0.06 MMBtu/hr)
EU-995f	Maintenance Shop Heater #2 (0.06 MMBtu/hr)
EU-995g	Maintenance Shop Heater #3 (0.06 MMBtu/hr)
EU-950b	Steephouse Overflow Tank (7,000 gallon)
EU-951a	Fiber Mid Set Water Tank (12,300 gallon)
EU-951b	Vacuum Pump Water Tank (2,500 gallon)
EU-952a	Starch Slurry Tank #1 (280,000 gallon)
EU-952b	Starch Slurry Tank #2 (280,000 gallon)
EU-952c	Evaporation Feed Tank (210,000 gallon)
EU-953a	Premix Tank (2,900 gallon)
EU-953b	First Stage Secondary Liquefaction Reactor (62,000 gallon)
EU-953c	Second Stage Secondary Liquefaction Reactor (62,000 gallon)
EU-953d	Ethanol Blend Tank - Hydrolyzate Syrup (30,000 gallon)
EU-954a	Liquefaction Reprocess Tank (26,000 gallon)
EU-954b	Liquefaction Hotwell (235 gallon)
EU-955	MF CIP Tank (3,300 gallon)
EU-956	MR Hotwell (470 gallon)
EU-957a	Raw Light Steep Water Tank (7,000 gallon)
EU-957b	Sterile Light Steep Water Tank (6,500 gallon)
EU-959	CIP Rinse Tank (65,000 gallon)
EU-970	Thin Stillage Tank (237,000 gallon)
EU-962	Sump Tank Sample Building (30 gallon)

Insignificant Activities Equipment List (Small Unit Exemption) ⁽¹⁾

Insignificant Emission Unit Number	Insignificant Emission Unit Description
SUE2014-1	Cracked Corn Loadout (350 bu/hr)
SUE2015-1	Cracked Corn Auger (1,000 bu/hr)
SUE2015-2	Gluten Flooring (19,000 lb/hr)
SUE2015-3	Cracked Corn Grain Vacuum (7,000 bu/hr)
SUE2015-4	Kanal Fans (22,000 cfm)
SUE2015-5	Bin Cleaning (7,000 bu/hr)
SUE2015-6	Kanal Fans #2 (22,000 cfm)
SUE2015-7	Light Steepwater Tank (200,000 gallons)
SUE2015-8	Heavy Steepwater Loadout 261 gal/min)
SUE2016-1	Sweetbran Loadout (60 ton/hr)
SUE2016-2	Wet Germ Reclaim (28,000 lb/hr)
SUE2016-3	Fiber Storage Pile (950 tons/day)
SUE2016-4	Feed Ingredients Pile (143 tons/day)
SUE2017-1	Germ Loadout Hood
SUE2017-2	Steep Heating Tank
SUE 2018-1	Fiber Trial #1
SUE 2018-3	Fiber Trial #2

⁽¹⁾ Emission Units qualify for Small Unit Exemption under 567 IAC 22.1(2)"w". Records shall be kept in accordance with 567 IAC 22.1(2)"w"(3).

II. Plant-Wide Conditions

Facility Name: Cargill, Inc. – Fort Dodge
Permit Number: 17-TV-003-M001

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: 5 Years
Commencing on: November 27, 2017
Ending on: November 26, 2022

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed on or after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be

used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.
4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

Authority for Requirement: 567 IAC 23.3(2)"c"

40 CFR 60 Subpart A Requirements

This facility has units that are subject to 40 CFR 60 Subpart A: General Provisions.

Authority for Requirement: 40 CFR 60 Subpart A
567 IAC 23.1(2)

40 CFR 60 Subpart Db Requirements

This facility has units that are subject to 40 CFR 60 Subpart Db: Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.

See appendix for the complete text of this standard.

Authority for Requirement: 40 CFR 60 Subpart Db
567 IAC 23.1(2)"ccc"

40 CFR 60 Subpart Dc Requirements

This facility has units that are subject to 40 CFR 60 Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

See appendix for the complete text of this standard.

Authority for Requirement: 40 CFR Subpart Dc
567 IAC 23.1(2)"III"

40 CFR 60 Subpart Kb Requirements

This facility has units that are subject to 40 CFR 60 Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

See appendix for the complete text of this standard.

Authority for Requirement: 40 CFR 60 Subpart Kb
567 IAC 23.1(2)"ddd"

40 CFR 60 Subpart DD Requirements

This facility has units that are subject to 40 CFR 60 Subpart DD: Standards of Performance for Grain Elevators.

See appendix for the link to complete text of this standard.

Authority for Requirement: 40 CFR 60 Subpart DD
567 IAC 23.1(2)"ooo"

40 CFR 60 Subpart VVa Requirements

This facility has units that are subject to 40 CFR 60 Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006.

See appendix for the link to complete text of this standard.

Authority for Requirement: 40 CFR 60 Subpart VVa
567 IAC 23.1(2)"nn"

40 CFR 60 Subpart IIII Requirements

This facility has units that are subject to 40 CFR 60 Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

See appendix for the link to complete text of this standard.

Authority for Requirement: 40 CFR 60 Subpart IIII
567 IAC 23.1(2)"yyy"

40 CFR 63 Subpart A Requirements

This facility has units that are subject to 40 CFR 63 Subpart A: General Provisions.

Authority for Requirement: 40 CFR 63 Subpart A
567 IAC 23.1(4)"a"

40 CFR 63 Subpart B Requirements

This facility has units that are subject to 40 CFR 63 Subpart B: Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections 112(g) and 112(j).

See appendix for the link to complete text of this standard.

Authority for Requirement: 40 CFR 63 Subpart B
567 IAC 23.1(4)"b"

40 CFR 63 Subpart FFFF Requirements

This facility has units that are subject to 40 CFR 63 Subpart FFFF: National Emission Standard for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

See appendix for the link to complete text of this standard.

Authority for Requirement: 40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

40 CFR 63 Subpart ZZZZ Requirements

This facility has units that are subject to 40 CFR 63 Subpart ZZZZ: National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

See appendix for the link to complete text of this standard.

Authority for Requirement: 40 CFR 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

40 CFR 63 Subpart DDDDD Requirements

This facility has units that are subject to 40 CFR 63 Subpart DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

See appendix for the link to complete text of this standard.

Authority for Requirement: 40 CFR 63 Subpart DDDDD

III. Emission Point-Specific Conditions

Facility Name: Cargill, Inc. – Fort Dodge

Permit Number: **17-TV-003-M001**

Emission Point ID Number: EP-02

Associated Equipment

Table: Corn Receiving and Corn Handling

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-02	Corn Receiving Truck Dump No. 1	EC-02 Dust Collector	Corn	40,000 bu/hr	07-A-822-P8
EU-02a	Corn Receiving Truck Dump No. 2			40,000 bu/hr	
EU-04a	Corn Dump Receiving Collection Drag Conveyor	EC-04 Dust Collector		40,000 bu/hr	
EU-04b	Corn Receiving Leg Elevator			40,000 bu/hr	
EU-04c	Corn Storage Drag Conveyor			40,000 bu/hr	
EU-04d	Clean Corn Belt			12,500 bu/hr	
EU-04e	Overflow Bin			12,500 bu/hr	
EU-04f	Clean Corn Bucket Elevator			17,000 bu/hr	
EU-04g	Corn Storage Belt Conveyor			40,000 bu/hr	
EU-04h	Corn Silo No. 1			300,000 bu	
EU-04j	Corn Silo No. 2			300,000 bu	
EU-04k	Corn Silo No. 3			600,000 bu	
EU-04m	Corn Cleaner			12,500 bu/hr	
EU-04n	Steep Fill Drag			17,000 bu/hr	
EU-04p	Corn Reclaim Drag No. 1			12,500 bu/hr	
EU-04q	Corn Reclaim Drag No. 2			12,500 bu/hr	
EU-04r	Corn Reclaim Drag No. 3			12,500 bu/hr	
EU-10	Corn Dust Bin	EC-10 Bin Vent Filter		2,000 ft³	

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	07-A-822-P8; 567 IAC 23.3(2) "d"
	0% ⁽¹⁾	07-A-822-P8; BACT; 567 IAC 23.1(2) "ooo"
	5% ⁽¹⁾⁽²⁾	07-A-822-P8; 567 IAC 23.1(2) "ooo"
Particulate Matter (PM _{2.5})	0.09 lb/hr ⁽³⁾	07-A-822-P8
	0.00027 gr/dscf	07-A-822-P8; BACT

Pollutant	Limit	Authority for Requirement
Particulate Matter (PM ₁₀)	1.33 lb/hr ⁽³⁾	07-A-822-P8
	0.004 gr/dscf	07-A-822-P8; BACT
Particulate Matter (PM)	0.1 gr/dscf	07-A-822-P8; 567 IAC 23.4(7)
	0.01 gr/dscf	07-A-822-P8; 567 IAC 23.1(2) "ooo"
	0.004 gr/dscf	07-A-822-P8; BACT

⁽¹⁾ Applies when Corn Receiving Truck Dump No. 2 (EU-02a) is in operation (40 CFR §60.302(b)(1) and (2))

⁽²⁾ Fugitive opacity requirement for Corn Receiving Truck Dump No. 2 (EU-02a) (40 CFR §60.302(c)(1))

⁽³⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:

- A. A maximum of 65.70 million bushels of grain per 12-month rolling period may be received by the facility.
 - a. The owner or operator shall record the amount of grain received each month in bushels. The owner or operator shall calculate and record 12-month rolling totals.
- B. The facility, Plant Number 94-01-080, shall not grind more than 65.70 million bushels of corn per rolling 12-month period.
 - a. Record monthly the amount of corn that is ground at the facility, Plant Number 94-01-080, in bushels. Calculate and record 12-month rolling totals.
- C. All grain unloading activities shall be conducted within an enclosure. During hopper truck unloading, the enclosure shall be enclosed via means of a closed door on either the entrance or exit of the unloading bay. During any other type of truck unloading, the enclosure shall be enclosed via means of a door on both the entrance and exit of the unloading bay, with the bay aspirated at negative pressure during unloading.
- D. The face velocity of the aspiration air across the dump pit shall be a minimum of 1 ft/s.
- E. The pressure drop for each baghouse (EC-02 and EC-04) shall be maintained between 0.1 and 8.0 inches of H₂O.
 - a. The owner or operator shall collect the pressure drop for the baghouse, in inches of H₂O, a minimum of once per 15 minutes, and record the average per 8-hour period. This requirement shall not apply on the days that the baghouse or the equipment that the baghouse controls is not in operation.
 - b. Measured operating levels outside the permitted operating range will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
 - c. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from response to the alarm system or to inspection/maintenance of the control equipment and the monitoring devices.

- F. An alarm shall be installed which will alert the operator whenever the pressure drop varies outside the allowable range.
- G. The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications.
- H. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process and remain shut down until repairs are completed, or continue to operate the process while taking opacity observations (following the procedures of 40 CFR 60 Appendix A, Method 9) to ensure that the opacity does not exceed the emission limits during the time of online repair.
- I. The owner or operator shall calculate the annual emissions of PM, PM₁₀, PM_{2.5}, and VOC in tons per year on a calendar year basis, for a period of five years following resumption of regular operations and maintain a record of regular operations after the change, as required in IAC 567-33.3(18)"f"(4). This information shall be retained by the owner or operator for a period of ten years after project 19-183 is completed.
- J. The owner or operator shall submit a report to the department if the annual emissions, in tons per year, from project 19-183 exceed the baseline actual emissions by an amount that is "significant" as defined in IAC 567-33.3(1) for that pollutant. The baseline actual emissions are set at 17.83 tons per year for PM, 16.48 tons per year for PM₁₀, 14.66 tons per year for PM_{2.5} and 198.07 tons per year for VOC.

New Source Performance Standards (NSPS):

The following subparts apply to the emission unit(s) in this permit:

EU ID	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
02a	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	DD	<i>Standards of Performance for Grain Elevators</i>	NA	23.1(2)"ooo"	§60.300 – §60.304

The other units exhausting through this emission point are not subject, as they were constructed prior to the increase in grain storage capacity at this plant that made Subpart DD applicable, or else is not an affected facility.

Authority for Requirement: DNR Construction Permit 07-A-822-P8
 40 CFR 60 Subpart DD
 567 IAC 23.1(2) "ooo"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 130

Stack Opening, (inches, dia.): 40

Exhaust Flow Rate (scfm): 38,750

Exhaust Temperature (°F): 85

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 07-A-822-P8

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐
(Facility O & M required for EC-10)

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-11

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-11	Dry Ingredients Storage Bin	EC-11 Bin Vent Filters	Dry Ingredients	250,000 lbs capacity; 100,000 lb/hr loadout	07-A-832-P5

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	07-A-832-P5; 567 IAC 23.3(2)"d"
	0%	07-A-832-P5; BACT
Particulate Matter (PM _{2.5})	0.0024 lb/hr ⁽¹⁾	07-A-832-P5
	0.002 gr/dscf	07-A-832-P5; BACT
Particulate Matter (PM ₁₀)	0.007 lb/hr ⁽¹⁾	07-A-832-P5
	0.004 gr/dscf	07-A-832-P5; BACT
Particulate Matter (PM)	0.1 gr/dscf	07-A-832-P5; 567 IAC 23.4(7)
	0.004 gr/dscf	07-A-832-P5; BACT

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The owner or operator shall operate, inspect, and maintain the control equipment according to manufacturer's specifications.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall maintain a record of all daily checks, inspections, maintenance activities, and any actions resulting from the inspection/maintenance of the control equipment and the monitoring devices.
- B. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process and remain shut down until repairs are completed, or

continue to operate the process while taking opacity observations (following the procedures of 40 CFR 60 Appendix A, Method 9) to ensure that the opacity does not exceed the emission limits during the time of online repair.

Authority for Requirement: DNR Construction Permit 07-A-832-P5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 72

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 192 max

Exhaust Temperature (°F): 90

Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 07-A-832-P5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-12

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-12a	Pneumatic Cracks Line	EC-12a Dust Collector	Cracked Corn	200,000 lbs capacity; 5,500 lb/hr transfer	12-A-150-P5

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	12-A-150-P5; 567 IAC 23.3(2)"d"
	0%	12-A-150-P5; BACT
Particulate Matter (PM _{2.5})	0.095 lb/hr	12-A-150-P5
	0.002 gr/dscf	12-A-150-P5; BACT
Particulate Matter (PM ₁₀)	0.24 lb/hr	12-A-150-P5
	0.004 gr/dscf	12-A-150-P5; BACT
Particulate Matter (PM)	0.1 gr/dscf	12-A-150-P5; 567 IAC 23.4(7)
	0.004 gr/dscf	12-A-150-P5; BACT

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The pressure drop for the dust collector shall be maintained between 0.1 and 8.0 inches of H₂O.
- B. An alarm shall be installed which will alert the operator whenever the pressure drop varies outside the allowable range.
- C. The owner or operator shall properly operate and maintain equipment to continuously monitor the pressure drop of the baghouse. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual or per a written facility-specific operation and maintenance plan.
- D. The owner or operator shall collect and the pressure drop for the baghouse, in inches of H₂O, a minimum of once per 15 minutes, and record the average per 8-hour period. This requirement shall not apply on the days that the baghouse or the equipment that the baghouse controls is not in operation.

- E. Measured operating levels outside the permitted operating range will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
- F. The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications.
- G. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from response to the alarm system or to inspection/maintenance of the control equipment and the monitoring devices.
- H. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process and remain shut down until repairs are completed, or continue to operate the process while taking opacity.

Authority for Requirement: DNR Construction Permit 12-A-150-P5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 111.5

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 3,500

Exhaust Temperature (°F): 80

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 12-A-150-P5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-13

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-13	Dry Ingredients Storage Bin	EC-13 Bin Vent Filters	Dry Ingredients	250,000 lbs capacity; 100,000 lb/hr loadout	12-A-151-P2

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	12-A-151-P2; 567 IAC 23.3(2)"d"
	0%	12-A-151-P2; BACT
Particulate Matter (PM _{2.5})	0.0024 lb/hr ⁽¹⁾	12-A-151-P2
	0.002 gr/dscf	12-A-151-P2; BACT
Particulate Matter (PM ₁₀)	0.007 lb/hr ⁽¹⁾	12-A-151-P2
	0.004 gr/dscf	12-A-151-P2; BACT
Particulate Matter (PM)	0.1 gr/dscf	12-A-151-P2; 567 IAC 23.4(7)
	0.004 gr/dscf	12-A-151-P2; BACT

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The owner or operator shall operate, inspect, and maintain the control equipment according to manufacturer's specifications.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall maintain a record of all daily checks, inspections, maintenance activities, and any actions resulting from the inspection/maintenance of the control equipment and the monitoring devices.
- B. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform

a controlled shutdown of the process and remain shut down until repairs are completed, or continue to operate the process while taking opacity observations (following the procedures of 40 CFR 60 Appendix A, Method 9) to ensure that the opacity does not exceed the emission limits during the time of online repair.

Authority for Requirement: DNR Construction Permit 12-A-151-P2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 72

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): 192

Exhaust Temperature (°F): 90

Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 12-A-151-P2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-19

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-19a	Stripping Column	EC-19B RTO & EC-19C Scrubber	Ethanol	60,450 gallons	07-A-838-P8
EU-19b	Rectifying Column		Ethanol	77,055 gallons	
EU-19k	Molecular Sieve Unit		Ethanol	160,800 gallons	
EU-19n	Beer Still No. 1		Ethanol	87,130 gallons	
EU-19o	Degas Column		Ethanol	15,280 gallons	
EU-19c	Pre-fermenter B	EC-19B RTO & EC-19D Scrubber	Ethanol	822,000 gallons	
EU-19d	Pre-fermenter		Ethanol	822,000 gallons	
EU-19e	Fermenter No. 1		Ethanol	1,097,000 gallons	
EU-19f	Fermenter No. 2		Ethanol	1,097,000 gallons	
EU-19g	Fermenter No. 3		Ethanol	1,097,000 gallons	
EU-19h	Fermenter No. 4		Ethanol	1,097,000 gallons	
EU-19i	Beerwell		Ethanol	1,097,000 gallons	
EU-19k	Molecular Sieve Unit	EC-19B RTO & EC-19C Scrubber	Ethanol	160,800 gallons	
EU-19l	MSU Evaporator	EC-19B RTO	Ethanol	8,100 gallons	
EU-19m	Rectifying Column Evaporator		Ethanol	12,800 gallons	
EU-19n	Beer Still No. 1	EC-19B RTO & EC-19C Scrubber	Ethanol	87,130 gallons	
EU-19o	Degas Column		Ethanol	15,280 gallons	

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

PSD Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	tons/yr	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.18 ¹	0.0075 lb/MMBtu ^{2,3}	BACT
PM ₁₀	0.18 ¹	0.0075 lb/MMBtu ^{2,3}	BACT
PM _{2.5}	0.18 ¹	0.0075 lb/MMBtu ^{2,3}	BACT
Opacity	NA	0% ⁴	BACT
Sulfur Dioxide (SO ₂)	13.14 ¹	90% reduction ^{2,5} or 10 ppm _v ^{2,6}	BACT
Nitrogen Oxides (NO _x)	0.89 ⁷	0.04 lb/MMBtu ^{2,8}	BACT
Volatile Organic Compounds (VOC)	7.43 ⁹	98% reduction ^{2,10} or 20 ppm _v ^{2,11}	BACT
Carbon Monoxide (CO)	1.79 ¹²	0.08 lb/MMBtu ^{2,8}	BACT
Carbon Dioxide equivalent (CO ₂ e)	2,632.55 ¹³	NA	BACT

- (1) The emission limit includes start-up, shutdown, and malfunctions.
- (2) The emission limit is expressed as the average of three (3) test runs.
- (3) The emission limit applies at all times.
- (4) The emission limit is based on a six (6) minute average.
- (5) The percent reduction limit applies across the scrubbers, EC-19D and EC-19C.
- (6) The concentration limit applies to the exhaust of the RTO (EC-19B).
- (7) The emission limit includes start-up, shutdown, and malfunctions.
- (8) The emission limit applies at all times
- (9) The emission limit correlates to an annual production limit of 130 million gallons of denatured ethanol per 12-month rolling period.
- (10) The percent reduction limit applies to the exhaust of the RTO (EC-19B).
- (11) The concentration limit does not include start-up, shutdown, or malfunctions.
- (12) The emission limit includes start-up, shutdown, and malfunctions.
- (13) The emission limit does not include carbon dioxide emissions from fermentation or the combustion of ethanol vapors, per 567 IAC 33.3(1) "Subject to Regulation" 2.(a).

National Emission Standards for Hazardous Air Pollutants

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	Limits	Reference/Basis
Total Organic HAP	$\geq 98\%$ reduction or $\leq 20 \text{ ppm}_v^1$	40 CFR Part 63, Subpart FFFF
Total Organic Compounds (TOC)		567 IAC 23.1(4)"cf" ²

- (1) The emission limit is for Group 1 continuous process vents in Table 1 to Subpart FFFF of Part 63 – *Emission Limits and Work Practice Standards for Continuous Process Vents*. Reduce emissions of Total Organic HAP by ≥ 98 percent by weight or to an outlet process concentration $\leq 20 \text{ ppm}_v$ as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except a flare).
- (2) Reference in the Iowa Administrative Code (IAC) for 40 CFR Part 63, Subpart FFFF – *National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing*.

Other Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr ¹	tons/yr ²	Other Limits	Authority
Particulate Matter (PM) – State	NA	NA	0.1 gr/dscf ¹	567 IAC 23.4(7)
PM ₁₀	0.04	NA	NA	NAAQS
PM _{2.5}	0.04	NA	NA	NAAQS
Opacity	NA	NA	40% ^{3, 4}	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO ₂)	3.0	NA	500 ppm _v	567 IAC 23.3(3)"e"
Nitrogen Oxides (NO _x)	0.20	NA	NA	NA
Carbon Monoxide (CO)	0.41	NA	NA	NA

- (1) The emission limit is expressed as the average of three (3) runs.
- (2) The emission limit is based on a twelve (12) month rolling total.
- (3) The emission limit is based on a six (6) minute average.
- (4) An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Operational Limits, Requirements, & Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall not exceed a facility-wide production limit at Plant Number 94-01-080 of 130 million gallons of denatured ethanol per 12-month rolling period.
 - a. The owner or operator shall record the amount of denatured ethanol, in gallons, produced at Plant Number 94-01-080 on a monthly basis.
 - b. The owner or operator shall calculate and record the amount of denatured ethanol, in gallons, produced at Plant Number 94-01-080 on a rolling 12-month basis.
- B. The owner or operator shall operate the control equipment (scrubbers, EC-19C and EC-19D; and the RTO, EC-19B) at all times that any of the equipment controlled by these devices is in operation.
 - a. The RTO (EC-19B) shall only combust natural gas and/or process off-gases.
 - b. The RTO (EC-19B) shall maintain an operating temperature (measured as a 3-hour average) of no less than 50 degrees Fahrenheit below the average operating temperature of the oxidizer recorded during the most recent performance test that demonstrated compliance with the emission limits.
 - i. The owner or operator shall install a temperature monitoring device, as defined in 40 CFR §63.981, and shall collect and record the combustion chamber temperature of the oxidizer, in degrees Fahrenheit, on a continuous basis.
 - ii. The owner or operator shall calculate and record the 3-hour block average of the combustion chamber temperature in degrees Fahrenheit. If the 3-hour average combustion chamber of the oxidizer falls below the value specified in Permit Condition 5.B, the owner or operator shall investigate and make necessary corrections. This requirement shall not apply on the days that the equipment that the RTO controls is not in operation.
 - c. The owner or operator shall maintain the flowrates for scrubbers, EC-19C and EC-19D at or above the minimum flowrate of 4 gallons per minute for EC-19C and 32 gallons per minute for EC-19D.

- i. The owner or operator shall install an alarm to alert the operator whenever the flowrate drops below the minimum allowed.
 - ii. The owner or operator shall monitor the flowrate a minimum of once per 15 minutes and record the average per each 8-hour period.
 - 1. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, or per written facility's (Plant Number 94-01-080) operation and maintenance plan. This requirement shall not apply on the days that the equipment that the scrubbers control is not in operation.
 - d. Measured operating levels outside the permitted operating range will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
- C. The owner or operator shall inspect and maintain the control equipment (scrubbers, EC-19C and EC-19D, and the RTO, EC-19B) in accordance with the manufacturer's recommendations, instructions, and operating manuals, or per written facility's (Plant Number 94-01-080) operation and maintenance plan.
- a. The owner or operator shall keep records of all maintenance and inspection activities performed on the control equipment (scrubbers, EC-19C and EC-19D, and the RTO, EC-19B). The records shall include, but shall not be limited to:
 - i. The date that any inspection and/or maintenance was performed on the control equipment;
 - ii. Any issues identified during the inspection;
 - iii. Any issues addressed during the maintenance activities;
 - iv. Frequency and amount of time the oxidizer malfunctions;
 - v. Any actions taken to correct oxidizer operating temperature malfunctions;
 - vi. Total emissions, in tons, emitted during control equipment malfunctions; and
 - vii. Identification of the staff member performing the maintenance or inspection.

- D. The owner or operator shall comply with the applicable requirements in 40 CFR Part 63, Subpart A [§63.1 - §63.15] and 40 CFR Part 63, Subpart FFFF [§63.2430 - §63.2550], including those not specifically mentioned in this permit.
- a. The owner or operator shall develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR §63.6(e).
 - i. Per 40 CFR §63.2525(j), the SSMP is not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and it is optional for other equipment.
 - b. Per 40 CFR §63.2450, for the closed vent system and oxidizer, the owner or operator shall comply with 40 CFR §63.982(c) and the requirements reference therein.
 - c. Per 40 CFR §63.2455 and §63.2460, the owner or operator shall comply with all the applicable operating requirements in Tables 1 and 2 to Subpart FFFF of Part 63.
 - d. The owner or operator shall comply with the notifications, reporting, and recordkeeping requirements in 40 CFR §63.2515, §63.2520, and §63.2525, respectively.

Authority for Requirement: DNR Construction Permit 07-A-838-P8

NSPS & NESHAP Applicability:

These emission units are subject to 40 CFR Part 60, Subpart A – General Provisions (40 CFR §60.1 through 40 CFR §60.19) of the New Source Performance Standards and Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006 (40 CFR §60.480a through 40 CFR §60.489a) and is also subject to the requirements of 567 IAC 23.1(2)"nn".

These emission units are subject to 40 CFR Subpart 63 Subpart A – General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF –National Emission Standards for Hazardous Air Pollutant: Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550) and is also subject to the requirements of 567 IAC 23.1(4)"cf". Not all of the general provisions in Subpart A are applicable to sources subject to the requirements of Subpart FFFF. See Table 12 to Subpart FFFF of Part 63 for a detailed listing of which general provisions are applicable.

Authority for Requirement: DNR Construction Permit 07-A-838-P8
567 IAC 23.1(2)"nn"
40 CFR 60 Subpart VVa
567 IAC 23.1(4)"cf"
40 CFR 63 Subpart FFFF

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 83

Stack Opening, (inches, dia.): 40

Exhaust Flow Rate (scfm): 15,000

Exhaust Temperature (°F): 200

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 07-A-838-P8

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
VOC	Material Usage Recordkeeping	12-month rolling period (See Operating Requirements with Associated Monitoring and Recordkeeping, A.)	NA	NA

Opacity Monitoring:

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of the violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals

throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-22

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-22	Alcohol Rework Tank	EC-22 Internal Floating Roof	Ethanol	250,000 gallons	07-A-839-P5

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Volatile Organic Compounds (VOC)	0.07 ton/yr	07-A-839-P5; BACT

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. This process tank shall store up to 200° ethanol.
- B. Maximum throughput of this tank shall be limited to 9,500,000 gallons per twelve month rolling period.
- C. The tank shall be designed and operated to meet the requirements for an internal floating roof in 40 CFR §63.1062 through §63.1063 and 40 CFR §60.112b as required by the best available control technology (BACT) analysis. The access hatch shall be gasketed, and there shall be no column or ladder wells on the tank.
- D. The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall record the monthly throughput of this tank, and update the twelve month rolling total on a monthly basis.
- B. Reporting and recordkeeping shall include keeping the following records:
 - i. Certification that the internal floating roof meets the specification of 40 CFR §60.112b(a)(1) and 40 CFR §60.113b(a)(1) or 40 CFR §63.1062 and §63.1063.
 - ii. A record of each inspection performed. Each record shall identify the storage vessel on which the inspection was performed and shall include the date of the inspection and the observed condition of each component of the control equipment (seals, internal floating roof, fittings, etc). If an inspection finds control equipment defects, the record shall include the reason the tank did not meet the specifications and a description of the repairs made.

- C. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from the inspection/maintenance of the control equipment.

Authority for Requirement: DNR Construction Permit 07-A-839-P5

NESHAP Applicability:

This emission unit is subject to 40 CFR Subpart 63 Subpart A – General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF – National Emission Standards for Hazardous Air Pollutant: Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550) and is also subject to the requirements of 567 IAC 23.1(4)"cf". The storage tank is considered part of the MCPU, but as the tank would contain HAP only as impurities, it does not meet the definition of "storage tank" as given in Subpart FFFF and so is not subject to any requirements of the subpart.

Authority for Requirement: DNR Construction Permit 07-A-839-P5
567 IAC 23.1(4)"cf"
40 CFR 63 Subpart FFFF

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 38
Stack Opening, (inches, dia.): 12
Exhaust Flow Rate (scfm): Working and Breathing Losses
Exhaust Temperature (°F): 85
Discharge Style: Downward
Authority for Requirement: DNR Construction Permit 07-A-839-P5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-24

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-24	Corrosion Inhibitor Tank	-	Corrosion Inhibitor	8,000 gallons	07-A-841-P7

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Volatile Organic Compounds (VOC)	0.0683 ton/yr	07-A-841-P7; BACT

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. This tank shall store only corrosion inhibitor.
- B. Maximum throughput of this tank shall be limited to 11,600 gallons per twelve month rolling period.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall record the monthly throughput of this tank, and update the twelve month rolling total on a monthly basis.

NESHAP Applicability:

This emission unit is subject to 40 CFR Subpart 63 Subpart A – General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF – National Emission Standards for Hazardous Air Pollutant: Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550) and is also subject to the requirements of 567 IAC 23.1(4)"cf". The tank is considered part of the MCPU, but as the tank would contain HAP only as impurities, it does not meet the definition of "storage tank" as given in Subpart FFFF and so is not subject to any requirements of the subpart.

Authority for Requirement: DNR Construction Permit 07-A-841-P7
567 IAC 23.1(4)"cf"
40 CFR 63 Subpart FFFF

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 15

Stack Opening, (inches, dia.): 4

Exhaust Flow Rate (scfm): Working and Breathing Losses

Exhaust Temperature (°F): 85

Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 07-A-841-P7

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-25

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-25	Denaturant Storage Tank	EC-25 Internal Floating Roof	Gasoline	125,000 gallons	07-A-842-P4

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Volatile Organic Compounds (VOC)	1.32 ton/yr	07-A-842-P4; BACT

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The owner or operator shall furnish the Department with final detailed plans and specifications for all emission control equipment selected by the owner to meet the emission limits contained in this permit. In addition, the facility shall detail all revisions made to the affected emission units. This information shall be submitted to the Department at least 30 days in advance of construction of any control equipment.
- B. The owner or operator shall operate, inspect, and maintain the control equipment according to manufacturer's specifications.
- C. This tank shall store only denaturant.
- D. Maximum throughput of this tank shall be limited to 2,875,000 gallons per twelve month rolling period.
- E. This emission unit is subject to all applicable operating limits set forth in NSPS Subparts A (40 CFR §60.1 through §60.19) and Kb (40 CFR §60.110b through §60.117b).
- F. The owner or operator shall comply with all applicable requirements for the storage tank according to the provisions in 40 CFR §60.112b.
- G. The tank shall be designed and operated to meet the requirements for an internal floating roof in 40 CFR §63.1062 through §63.1063 and 40 CFR §60.112b as required by the BACT analysis.
- H. This emission unit is subject to all applicable operating limits set forth in NESHAP Subparts A (40 CFR §63.1 through §63.15) and FFFF (40 CFR §63.2430 through §63.2550) as a Group 1 storage tank.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall record the monthly throughput of this tank, and update the twelve month rolling total on a monthly basis.
- B. This emission unit is subject to all applicable monitoring and recordkeeping requirements set forth in NESHAP Subparts A (40 CFR §63.1 through §63.15) and FFFF (40 CFR §63.2430 through §63.2550) as a Group 1 storage tank.
- C. The emission unit is subject to all applicable recordkeeping, notification and reporting requirements as set forth in NSPS Subparts A (40 CFR §60.1 through §60.19) and Kb (40 CFR §60.115b and §60.116b). Reporting and recordkeeping shall include the following:
 - i. A record of the dimensions of the storage vessel, an analysis of the capacity of the storage vessel, and an identification of the liquid stored.
 - ii. Certification that the internal floating roof meets the specifications of 40 CFR §60.112b(a)(1) and 40 CFR §60.113b(a)(1) or 40 CFR §63.1062 and §63.1063.
 - iii. A record of each inspection performed. Each record shall identify the storage vessel on which the inspection was performed and shall include the date of the inspection and the observed condition of each component of the control equipment (seals, internal floating roof, fittings, etc.) If an inspection finds control equipment defects, the record shall include the reason the tank did not meet the specifications and the date and a description of the repairs made.

NSPS & NESHAP Applicability:

This emission unit is subject to the New Source Performance Standard (NSPS) - 40 CFR Part 60, Subpart A – General Provisions, and Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels.

This emission unit is subject to 40 CFR Subpart 63 Subpart A – General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF – National Emission Standards for Hazardous Air Pollutant: Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550) and is also subject to the requirements of 567 IAC 23.1(4)"cf". The tank is considered a Group 1 storage tank as defined in the subpart.

Authority for Requirement: DNR Construction Permit 07-A-842-P4
567 IAC 23.1(2) "ddd"
40 CFR 60 Subpart Kb
567 IAC 23.1(4)"cf"
40 CFR 63 Subpart FFFF

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 32

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): Working and Breathing Losses

Exhaust Temperature (°F): 85

Discharge Style: Downwards

Authority for Requirement: DNR Construction Permit 07-A-842-P4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: EP-26, EP-27

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP-26	EU-26	Ethanol Storage Tank No. 1	EC-26 Internal Floating Roof	Ethanol	2,000,000 gallons	07-A-843-P4
EP-27	EU-27	Ethanol Storage Tank No. 2	EC-27 Internal Floating Roof	Ethanol	2,000,000 gallons	07-A-844-P4

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Volatile Organic Compounds (VOC)	0.18 ton/yr	07-A-843-P4; 07-A-844-P4; BACT

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The owner or operator shall furnish the Department with final detailed plans and specifications for all emission control equipment selected by the owner to meet the emission limits contained in this permit. In addition, the facility shall detail all revisions made to the affected emission units. This information shall be submitted to the Department at least 30 days in advance of construction of any control equipment.
- B. The owner or operator shall operate, inspect, and maintain the control equipment according to manufacturer's specifications, or per written facility-specific operation and maintenance plan.
- C. This tank may store denatured and undenatured ethanol.
- D. Maximum combined throughput of EU-26 and EU-27 shall be limited to 130,000,000 gallons per twelve month rolling period.
- E. These emission units are subject to all applicable operating limits set forth in NSPS Subparts A (40 CFR §60.1 through §60.19) and Kb (40 CFR §60.110b through §60.117b).
- F. The owner or operator shall comply with all applicable requirements for the storage tanks according to the provisions in 40 CFR §60.112b.
- G. The tanks shall be designed and operated to meet the requirements for an internal floating roof in 40 CFR §63.1062 through §63.1063 and 40 CFR §60.112b as required by the BACT analysis.
- H. If used to store denatured ethanol, the emission units are subject to all applicable operating limits set forth in NESHAP Subparts A (40 CFR §63.1 through §63.15) and FFFF (40 CFR §63.2430 through §63.2550).

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall record the monthly combined throughput of tanks EU-26 and EU-27, and update the twelve month rolling total on a monthly basis.
- B. If used to store denatured ethanol, the emission units are subject to all applicable monitoring and recordkeeping requirements set forth in NESHAP Subparts A (40 CFR §63.1 through §63.15) and FFFF (40 CFR §63.2430 through §63.2550).
- C. The emission units are subject to all applicable recordkeeping, notification and reporting requirements as set forth in NSPS Subparts A (40 CFR §60.1 through §60.19) and Kb (40 CFR §60.115b and §60.116b). Reporting and recordkeeping shall include the following:
 - i. A record of the dimensions of the storage vessel, an analysis of the capacity of the storage vessel, and an identification of the liquid stored.
 - ii. Certification that the internal floating roof meets the specifications of 40 CFR §60.112b(a)(1) and 40 CFR §60.113b(a)(1) or 40 CFR §63.1062 and §63.1063.
 - iii. A record of each inspection performed. Each record shall identify the storage vessel on which the inspection was performed and shall include the date of the inspection and the observed condition of each component of the control equipment (seals, internal floating roof, fittings, etc.) If an inspection finds control equipment defects, the record shall include the reason the tank did not meet the specifications and the date and a description of the repairs made.

NSPS & NESHAP Applicability:

The emission units are subject to the New Source Performance Standard (NSPS) - 40 CFR Part 60, Subpart A – General Provisions, and Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels.

The emission units are subject to 40 CFR Subpart 63 Subpart A – General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF – National Emission Standards for Hazardous Air Pollutant: Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550) and is also subject to the requirements of 567 IAC 23.1(4)"cf". The storage tanks are considered part of the MCPU. Note that if the tanks are storing only undenatured ethanol, they would contain HAP only as impurities, so would not meet the definition of "storage tank" as given in Subpart FFFF and not be subject to any requirements of that subpart.

Authority for Requirement: DNR Construction Permits 07-A-843-P4 & 07-A-844-P4
567 IAC 23.1(4)"cf"
40 CFR 60 Subpart Kb
567 IAC 23.1(2) "ddd"
40 CFR 63 Subpart FFFF

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 73

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): Working and Breathing Losses

Exhaust Temperature (°F): 85

Discharge Style: Downward

Authority for Requirement: DNR Construction Permits 07-A-843-P4 & 07-A-844-P4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-29

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-29	Ethanol Rail Loadout System	EC-29 Vapor Combustor	Ethanol	1,650 gal/min	07-A-846-P3

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	07-A-846-P3; 567 IAC 23.3(2)"d"
	0%	07-A-846-P3; BACT
Particulate Matter (PM _{2.5})	0.14 lb/hr ⁽¹⁾	07-A-846-P3
Particulate Matter (PM ₁₀)	0.14 lb/hr ⁽¹⁾	07-A-846-P3
	0.0075 lb/MMBtu	07-A-846-P3; BACT
	0.09 ton/yr ⁽²⁾	07-A-846-P3; BACT
Particulate Matter (PM)	0.1 gr/dscf	07-A-846-P3; 567 IAC 23.3(2)"a"
	0.0075 lb/MMBtu	07-A-846-P3; BACT
	0.09 ton/yr ⁽²⁾	07-A-846-P3; BACT
Sulfur Dioxide (SO ₂)	0.2 lb/hr ⁽¹⁾	07-A-846-P3
	500 ppmv	07-A-846-P3; 23.3(3)"e"
	0.438 ton/yr ⁽²⁾	07-A-846-P3; BACT
Nitrogen Oxide (NO _x)	1.81 lb/hr ⁽¹⁾	07-A-846-P3
	0.098 lb/MMBtu	07-A-846-P3; BACT
	1.21 ton/yr ⁽²⁾	07-A-846-P3; BACT
Volatile Organic Compounds (VOC)	98% Reduction ⁽³⁾ or 20 ppmv ⁽³⁾	07-A-846-P3; BACT
	1.11 lb/hr ⁽⁴⁾	07-A-846-P3; BACT
	0.61 ton/yr ⁽²⁾	07-A-846-P3; BACT
Carbon Monoxide (CO)	1.52 lb/hr ⁽¹⁾	07-A-846-P3
	0.085 lb/MMBtu	07-A-846-P3; BACT
	1.02 ton/yr ⁽²⁾	07-A-846-P3; BACT
Carbon Dioxide equivalents (CO ₂ e)	9,545.5 ton/yr ⁽⁵⁾	07-A-846-P3; BACT

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}. The limit for SO₂ emissions is established to limit emissions below levels that predict exceedances of the 3-hour, 24-hour and annual NAAQS and increment for SO₂. The limit for NO_x emissions is established to limit emissions below levels that predict exceedances of the annual NAAQS and increment for NO_x. The limit for CO shows insignificant impact of the 1-hour and 8-hour NAAQS for CO.

⁽²⁾ Ton per year limits correlate to a loadout limit of 130,000,000 gallons per year.

⁽³⁾ The percent reduction limit applies across the vapor combustor, EC-29.

⁽⁴⁾ The pound per hour limit is the limit from the exhaust of the vapor combustor, EC-29.

⁽⁵⁾ Does not include carbon dioxide emissions from the combustion of ethanol vapors, per IAC 567-33.3(1) "Subject to Regulation" (2)(a).

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The facility shall not load out more than 130 million gallons of denatured ethanol per 12-month rolling period.
- B. The hatch seal on the vapor recovery system shall be visually inspected for any defects and to ensure that it is properly seated on the hatch opening prior to each hookup. Hatch seals that are damaged shall be removed from service until they are repaired or replaced.
- C. The vapor combustor, EC-29, shall be operated at all times ethanol is being loaded out. At no time shall the loadout system operate uncontrolled.
- D. The auxiliary fuel used in the vapor combustor, EC-29, is limited to natural gas or propane.
- E. The vapor combustor shall be designed and operated to meet a 98% VOC destruction efficiency.
- F. This emission unit is subject to all applicable operating limits set forth in NSPS Subparts A (40 CFR §60.1 through §60.19) and subpart VVa (40 CFR §60.480a through §60.489a).
- G. This emission unit is subject to all applicable operating limits set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2430 through 40 CFR §63.2550). Specifically, the facility shall comply with all applicable requirements for each transfer rack according to the provisions in 40 CFR §63.2475.
- H. The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record monthly, the total amount of denatured ethanol loaded out through this emission unit each month in gallons. Calculate and record 12-month rolling totals.
- B. This emission unit is subject to all applicable recordkeeping, notification and reporting requirements as set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2515, 40 CFR §63.2520 and 40 CFR §63.2525).
- C. The owner or operator shall follow the applicable recordkeeping and reporting standards of Subpart VVa, 40 CFR §60.486a and §60.487a.
- D. The owner or operator shall keep a record of the manufacturer's design expected efficiency available for inspection.
- E. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the monitoring device.

NSPS & NESHAP Applicability:

This emission unit is subject to 40 CFR Part 60, Subpart A – General Provisions (40 CFR §60.1 through 40 CFR §60.19) of the New Source Performance Standards and Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006 (40 CFR §60.480a through 40 CFR §60.489a) and is also subject to the requirements of 567 IAC 23.1(2)"nn".

This emission unit is subject to 40 CFR Subpart 63 Subpart A – General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF –National Emission Standards for Hazardous Air Pollutant: Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550) and is also subject to the requirements of 567 IAC 23.1(4)"cf". Not all of the general provisions in Subpart A are applicable to sources subject to the requirements of Subpart FFFF. See Table 12 to Subpart FFFF of Part 63 for a detailed listing of which general provisions are applicable.

Authority for Requirement: DNR Construction Permit 07-A-846-P3
567 IAC 23.1(2)"nn"
40 CFR 60 Subpart VVa
567 IAC 23.1(4)"cf"
40 CFR 63 Subpart FFFF

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30

Stack Opening, (inches, dia.): 72

Exhaust Flow Rate (scfm): 6,595

Exhaust Temperature (°F): 1,830

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 07-A-846-P3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. The facility shall use EPA Method 9 with a certified smoke reader for the monitoring method.

If an opacity $> 0\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-30

Associated Equipment

Table: Gluten Dryer, Non-Condensable Vent System and Wet Mill Aspiration

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-30a	Gluten Meal Dryer	EC-30A Wet Scrubber & EC-30B RTO	Gluten	21,000 lb/hr dry product 8 gpm heavy steepwater 15 gpm light steepwater	07-A-847-P9
EU-30b	Gluten Meal Dryer Process Heater		Natural Gas	36 MMBtu/hr	
EU-63a	Evaporator Vacuum Pumps	EC-30B RTO	Steepwater	1,000 lb/hr	
EU-07a	Corn Hopper	EC-07 Wet Scrubber	Corn	7,200 bushels	
EU-7b	1 st Grind Tank		Corn	40,000 gallons	
EU-07c	5 Steep Tanks		Corn	1,976,000 gallons	
EU-07g	SO2 Solution Absorption Column		Corn	500 acfm	
EU-07h	Light Steepwater Tank		Steepwater	64,000 gallons	
EU-07i	Steephouse Process Water Tank		Steepwater	64,000 gallons	
EU-07j	5 th Stage Sweet Fiber Wash Tank		Corn	41,000 gallons	
EU-07m	Mill Stream Feed Tank		Corn	27,000 gallons	
EU-07n	Clarifier Overflow Tanks		Corn	30,000 gallons	
EU-07o	2 nd Grind Tank		Corn	37,600 gallons	
EU-07p	3 rd Grind Tank		Corn	20,000 gallons	
EU-07q	Fiber Wash Feed Tank		Corn	20,000 gallons	
EU-07r	Millhouse Overflow Tank		Corn	15,000 gallons	
EU-07s	4 th Stage Starchy Fiber Wash Tank		Corn	11,000 gallons	
EU-07t	Clarifier Feed Tank		Corn	75,000 gallons	
EU-07u	Fiber Dewatering Operations		Dry Bran	40,000 lb/hr	
EU-07v	Heavy Gluten Tank		Gluten	56,000 gallons	
EU-07w	Heavy Gluten Swing Tank		Gluten	240,000 gallons	
EU-07x	Process Water Tank		Process Water	56,000 gallons	
EU-07y	Primary Feed Tank		Corn	30,000 gallons	
EU-07z	Gluten Thickening Feed Tank		Corn	30,000 gallons	
EU-07aa	Starch Wash Feed Tank		Corn	30,000 gallons	
EU-07bb	Starch Wash Water Tank		Corn	10,000 gallons	
EU-07cc	Germ Filtrate Tank		Corn	10,000 gallons	
EU-07ee	Gluten Dewatering Operations		CGM	21,000 lb/hr	
EU-35c	Bunker Dump Drag		Dry Bran	40,000 lb/hr	
EU-07ff	Gluten Recycle Screw		CGM	21,000 lb/hr	
EU-07ii	Steep Batch Tank #1		Corn	64,000 gallons	
EU-07jj	Steep Batch Tank #2		Corn	65,000 gallons	

EU-07kk	Starchy Fiber Slurry Tank		Corn	125,000 gallons	
EU-07mm	Heavy Steep Water Surge Tank		Corn	240,000 gallons	
EU-07nn	Solids Recovery Tank		Corn	30,000 gallons	
EU-07pp	Gluten Cloth Wash Tank		Corn	10,000 gallons	

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

PSD Emission Limits

Gluten Meal Dryer (EU-30) and Non-Condensable Vent System (EU-63) – with RTO

Pollutant	Limit^{1,2}	Reference (567 IAC)
Particulate Matter (PM)	0.0142 gr/dscf ⁵	07-A-847-P9; BACT
PM ₁₀	0.0142 gr/dscf ⁵	07-A-847-P9; BACT
Opacity	0% ⁶	07-A-847-P9; BACT
Sulfur Dioxide (SO ₂)	90% Reduction ^{3,11} or 4.32 lb/hr ¹²	07-A-847-P9; BACT
Nitrogen Oxides (NO _x)	0.08 lb/MMBtu ^{5,9} 0.04 lb/MMBtu ^{8,9} 10.70 TPY ¹⁰	07-A-847-P9; BACT
Volatile Organic Compounds	98% Reduction ^{4, 13} or 0.65 lb/hr ¹⁴	07-A-847-P9; BACT
Carbon Dioxide Equivalent (CO _{2e})	21,254 TPY ^{7, 10,15}	07-A-847-P9; BACT
Carbon Monoxide (CO)	0.15 lb/MMBtu ^{5,9} 0.08 lb/MMBtu ^{8,9} and 20.53 TPY ¹⁰	07-A-847-P9; BACT

¹ Standard is expressed as the average of three (3) test runs unless otherwise noted.

² Standard applies at all times unless otherwise noted.

³ The percent reduction limit applies across the scrubber, EC-30A.

⁴ The percent reduction limit applies across the RTO, EC-30B.

⁵ The limit is from the exhaust of the RTO, EC-30B during biogas combustion

⁶ Standard is expressed as a six-minute average.

⁷ Does not include carbon dioxide emissions from the combustion of organic materials, per IAC 567-33.3(1)"Subject to Regulation"(2)(a).

⁸ The limit is from the exhaust of the RTO, EC-30B during natural gas combustion

⁹ Limit does not apply during start-up, shutdown or malfunction.

¹⁰ The NO_x, CO and CO_{2e} tons per year standards apply at all times including during periods of startup, shutdown and malfunction and RTO bypass operation

¹¹ The limit applies across the scrubber, EC-30A, when inlet SO₂ concentration is over 250 ppm_v

¹² The limit applies across the scrubber, EC-30A, when inlet SO₂ concentration is less than 250 ppm_v

¹³ The limit applies across the RTO, EC-30B, when inlet VOC concentration is over 100 ppm_v

¹⁴ The limit applies across the RTO, EC-30B, when inlet VOC concentration is less than 100 ppm_v

¹⁵ Limit does not assume any biogas is combusted in EU-30b, and includes emissions from EU-30b at all times of operation.

Gluten Meal Dryer (EU-30) and Non-Condensable Vent System (EU-63) – with RTO bypass operation

Pollutant	Limit^{1,2}	Reference (567 IAC)
Particulate Matter (PM)	0.0142 gr/dscf ⁵	07-A-847-P9; BACT
PM ₁₀	0.0142 gr/dscf ⁵	07-A-847-P9; BACT
Opacity	0% ⁶	07-A-847-P9; BACT
Sulfur Dioxide (SO ₂)	90% Reduction ^{3,11} or 4.32 lb/hr ¹²	07-A-847-P9; BACT
Nitrogen Oxides (NO _x)	0.08 lb/MMBtu ^{5,9} 0.04 lb/MMBtu ^{8,9}	07-A-847-P9; BACT
Volatile Organic Compounds	25% Reduction ^{4, 11} or 53.13 lb/hr ¹²	07-A-847-P9; BACT
Carbon Monoxide (CO)	0.30 lb/MMBtu ^{5,9} 0.16 lb/MMBtu ^{8,9}	07-A-847-P9; BACT

¹ Standard is expressed as the average of three (3) test runs unless otherwise noted.

² Standard applies at all times unless otherwise noted.

³ The percent reduction limit applies across the scrubber, EC-30A.

⁴ The percent reduction limit applies across the RTO, EC-30B.

⁵ The limit is from the exhaust of the RTO, EC-30B during biogas combustion

⁶ Standard is expressed as a six-minute average.

⁷ Does not include carbon dioxide emissions from the combustion of organic materials, per IAC 567-33.3(1) "Subject to Regulation"(2)(a). Based on 90% biogas usage per year in dryer..

⁸ The limit is from the exhaust of the RTO, EC-30B during natural gas combustion

⁹ Limit does not apply during start-up, shutdown or malfunction.

¹⁰ The NO_x, CO and CO_{2e} tons per year standards apply at all times including during periods of startup, shutdown and malfunction

¹¹ The limit applies across the scrubber, EC-30A, when inlet SO₂ or VOC concentration is over 250 ppm_v

¹² The limit applies across the scrubber, EC-30A, when inlet SO₂ or VOC concentration is less than 250 ppm_v

Wet Mill Aspiration (EU-07)

Pollutant	Limit^{1,2}	Reference (567 IAC)
Opacity	0% ⁴	07-A-847-P9; BACT
Sulfur Dioxide (SO ₂)	90% Reduction ³ or 6.12 lb/hr ⁵	07-A-847-P9; BACT
Volatile Organic Compounds	25% Reduction ³ or 33.0 lb/hr ⁵	07-A-847-P9; BACT

¹ Standard is expressed as the average of three (3) test runs unless otherwise noted.

² Standard applies at all times.

³ The percent reduction limit applies across the scrubber, EC-07, if inlet concentration is greater than 150 ppmv

⁴ Standard is expressed as a six-minute average.

⁵ Limit applies if inlet concentration to EC-07 is less than 150 ppmv

Other Emission Limits

Pollutant	lb/hr ¹	tons/yr ²	Other Limits	Reference/Basis
Particulate Matter (PM) – State	NA	NA	0.1 gr/dscf	567 IAC 23.4(7)
PM ₁₀	4.30	NA	NA	NA
PM _{2.5}	1.65	NA	NA	NA
Opacity	NA	NA	40%	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO ₂)	10.44	NA	500 ppm _v	567 IAC 23.3(3)"e"
Nitrogen Oxides (NO _x)	3.08	NA	NA	NA
Carbon Monoxide (CO)	5.8	NA	NA	NA
(Total HAP)	2.58 ³ 3.3 ⁴	NA	NA	NA

¹ Standard is expressed as the average of 3 test runs.

² Standard is a 12-month rolling total.

³ Limit applies during RTO operation

⁴ Limit applies during RTO bypass operations

Operational Limits, Requirements, & Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

Gluten Meal Dryer and Non-Condensable Vent System:

- A. The gluten meal dryer process heater shall combust only natural gas and/or biogas.
- B. Heavy steepwater from Cargill Wahpeton, South Dakota or Cargill Cedar Rapids (facility #57-01-004) or light steepwater from Cargill Fort Dodge (facility 94-01-080) may be added to the gluten dryer.
- C. Heavy steepwater from Cargill Wahpeton or Cargill Cedar Rapids (facility #57-01-004) shall not be added to the gluten dryer at the same time as light steepwater from Cargill Fort Dodge (facility 94-01-080).
- D. The RTO bypass mode shall only be used when the gluten meal dryer is in startup or during required RTO maintenance. The RTO shall not be bypassed when wet the wet gluten feed screw is in operation other than during required maintenance of the wet gluten feed screw.
- E. The RTO bypass mode shall not be used when steepwater is being added to the gluten dryer.
- F. The owner or operator shall record the amount of time that the wet gluten feed screw is in operation while the RTO is being bypassed. If the wet gluten feed screw is in operation during required maintenance of the wet gluten feed screw, records shall document if wet gluten is being added to the gluten dryer at that time.
- G. The owner or operator shall use the stack test to develop emission factors for NO_x and CO emissions during startup (bypass) mode.
- H. Calculate NO_x and CO emissions, including emissions during start-up, shutdown and

malfunction, from the dryer, in tons on a monthly basis and record the 12-month rolling total. The emissions from the bypass mode shall be calculated based on the results of the stack test.

- I. The control equipment, scrubber EC-30A, shall be operated at all times any of the operations controlled by the devices is in operation.
- J. The scrubber, EC-30A, flowrate shall be maintained at or above the flowrate of 275 gpm.
- K. An alarm shall be installed which will alert the operator whenever the flowrate drops below the minimum allowed.
- L. The owner or operator shall properly operate and maintain equipment to continuously monitor the scrubbant flowrate for EC-30A a minimum of once per 15 minutes, and record the average per 8-hour period. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan. This requirement shall not apply on the days that the equipment that the scrubber controls is not in operation
- M. The scrubber, EC-30A, scrubbant pH shall be maintained at a pH that is equal to or greater than the pH measured during the most recent performance test that demonstrates compliance with the permitted emission limits.
- N. The owner or operator shall maintain a record of the pH observed during the last successful compliance test for reference from scrubber, EC-30A.
- O. The owner or operator shall properly operate and maintain equipment to periodically monitor the scrubbant pH for the scrubber, EC-30A at a minimum rate of once per 15-minute period and record the average per 8-hour period. The monitoring device and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per a written facility-specific operation and maintenance plan.
- P. The control equipment, RTO EC-30B, shall be operated at all times any of the operations controlled by the devices is in operation except during startup of the gluten meal dryer or required RTO maintenance.
- Q. The RTO, EC-30B, shall only combust natural gas and/or process off-gasses.
- R. The RTO, EC-30B, shall maintain a 3-hour average temperature during operation of no more than 50 degrees Fahrenheit minus the average temperature of the oxidizer recorded during the most recent performance test, which demonstrated compliance with the emission limits.
- S. The owner or operator shall keep three-hour block records of the operating temperature of the RTO, EC-30B, and record all three-hour periods (during actual operations) during which the average temperature of the RTO is more than 50 degrees Fahrenheit less than the average temperature of the oxidizer during its most recent compliance test which demonstrated compliance with the emission limits.
- T. The owner or operator shall maintain a record of the average temperature of the RTO, EC-30B during the last successful compliance test for reference.
- U. Measured operating levels outside the permitted operating range will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the DNR may require additional proof to demonstrate

- compliance (e.g., stack testing).
- V. The owner or operator shall keep records of the frequency and amount of time the RTO, EC-30B malfunctions and estimate the emissions emitted during these malfunctions.
 - W. The owner or operator shall record the time (start and end) and date each time the bypass is used.
 - X. The owner or operator shall operate, inspect, and maintain the control equipment according to manufacturer's specifications.
 - Y. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from the inspection/maintenance of the control equipment and the monitoring devices.
 - Z. The owner or operator shall keep records of the amount of natural gas and biogas combusted in the gluten meal dryer on a monthly basis.
 - AA. The owner or operator shall calculate and update monthly the twelve month rolling totals for carbon dioxide equivalent (CO_{2e}) in tons, from EP-30. Carbon dioxide emissions from the combustion of biogas shall not be included in this calculation, although methane (CH_4) and nitrous oxide (N_2O) emissions shall be.

Wet Mill Aspiration System:

- BB. The control equipment, scrubber EC-07, shall be operated at all times any of the equipment controlled by the device is in operation.
- CC. The scrubber, EC-07, flowrate shall be maintained at or above 850 gallons per minute.
- DD. An alarm shall be installed which will alert the operator whenever the flowrate drops below the minimum allowed.
- EE. The owner or operator shall properly operate and maintain equipment to continuously monitor the scrubbant flowrate for EC-07 a minimum of once per 15 minutes, and record the average per 8-hour period. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan. This requirement shall not apply on the days that the equipment that the scrubber controls is not in operation.
- FF. The scrubber, EC-07, scrubbant pH shall be maintained at a pH that is equal to or greater than the pH measured during the most recent performance test that demonstrates compliance with the permitted emission limits.
- GG. The owner or operator shall collect and record the pH of the scrubbant, in standard units, at least once per day for scrubber, EC-07. This requirement shall not apply on the days that the scrubber or the equipment that the scrubber controls is not in operation.
- HH. The owner or operator shall maintain a record of the pH observed for scrubber, EC-07, during the last successful compliance test for reference.
- II. Measured operating levels outside the permitted operating range will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
- JJ. The owner or operator shall operate, inspect, and maintain the control equipment according to manufacturer's specifications.
- KK. The owner or operator shall maintain a record of all inspections, maintenance activities,

and any actions resulting from the inspection/maintenance of the control equipment and the monitoring devices.

Authority for Requirement: DNR Construction Permit 07-A-847-P9

NESHAP Applicability:

These units are subject to the "case-by-case" MACT rule (40 CFR Part 63, Subpart B) and IAC 23.1(4)"b", as the plant is a major source.

Authority for Requirement: DNR Construction Permit 07-A-847-P9
567 IAC 23.1(4)"b"
40 CFR 63 Subpart B

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Parameter	Value
Stack Height, (ft, from the ground)	200
Discharge Style	Vertical unobstructed
Stack Opening, (inches, dia.)	64
Exhaust Temperature (°F)	300
Exhaust Flowrate (scfm)	42,000 ¹

¹The exhaust flowrate of the Gluten Dryer and Non-Condensable Vent System RTO, EC-30B is 10,000 scfm. The exhaust flowrate of the Wet Mill Aspiration System scrubber, EC-07, is 32,000 scfm.

This emission point shall conform to the specifications listed below during RTO bypass:

Parameter	Value
Stack Height, (ft, from the ground)	200
Discharge Style	Vertical unobstructed
Stack Opening, (inches, dia.)	64
Exhaust Temperature (°F)	150
Exhaust Flowrate (scfm)	42,000

Authority for Requirement: DNR Construction Permit 07-A-847-P9

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant	Stack Test	Frequency	Method
NO _x	Yes ⁽³⁾⁽⁷⁾	Once ⁽⁹⁾	Method 7E
VOC ⁽¹⁾	Yes ⁽⁴⁾	Annually ⁽⁸⁾	Method 18 or 320
CO	Yes ⁽³⁾⁽⁷⁾	Once ⁽⁹⁾	Method 10
Total Organic HAP ⁽²⁾	Yes ⁽⁵⁾⁽⁶⁾	Annually ⁽⁸⁾	Method 18 or 320

- (1) VOC compliance for shall be determined using either Method 18 or Method 320. If Method 18 is used a pre-test survey will be required to determine which compounds to sample. Cargill may request different testing methods during the testing protocol if preferred test methods/procedures have changed or if new test methods/procedures are available.
- (2) Acetaldehyde that tests below detection limits shall be assumed to be emitting at a rate equal to the detection limit.
- (3) The permittee is required to test for SO₂, NO_x, and CO from the combined emissions of the Gluten Dryer and Non-Condensable Vent System (i.e. exhaust of the RTO, EC-30B) prior to combining those emissions with any other sources that vent to EP -30.
- (4) The permittee is required to test for VOC from the combined emissions of the Wet Mill Aspiration System (i.e. exhaust of the scrubber, EC-07) prior to combining those emissions with any other sources that vent to EP -30.
- (5) The permittee is required to test for Opacity and Total Organic HAP from the outlet of the emission point, while operating all sources that vent through the emission point.
- (6) These shall also be tested during bypass mode.
- (7) Alternative test protocols may be used if DNR approves them as providing equivalent results
- (8) Cargill may stop retests after two of the annual tests in a row demonstrate compliance with the permit limits.
- (9) This test shall be performed in the year 2019.

Authority for Requirement: DNR Construction Permit 07-A-847-P9

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Opacity Monitoring:

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of the violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been

unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐

(CAM requirements are fulfilled by the monitoring requirements for EC-07 in construction permit 07-A-847-P9)

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-33

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-33	Gluten Negative Convey/Cooler	EC-33 Dust Collector	Gluten	21,000 lb/hr	07-A-849-P6

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	07-A-849-P6; 567 IAC 23.3(2)"d"
	0%	07-A-849-P6; BACT
Particulate Matter (PM _{2.5})	0.19 lb/hr ⁽¹⁾	07-A-849-P6
Particulate Matter (PM ₁₀)	0.49 lb/hr ⁽¹⁾	07-A-849-P6
	0.004 gr/dscf	07-A-849-P6; BACT
Particulate Matter (PM)	0.1 gr/dscf	07-A-849-P6; 567 IAC 23.4(7)
	0.004 gr/dscf	07-A-849-P6; BACT
Sulfur Dioxide (SO ₂)	0.43 lb/hr ⁽¹⁾	07-A-849-P6
	500 ppmv	07-A-849-P6; 567 IAC 23.(3)"e"
	3.00 ppmv	07-A-849-P6; BACT
Volatile Organic Compounds (VOC)	5.00 ppmv ⁽²⁾	07-A-849-P6; BACT
	0.52 lb/hr ⁽³⁾	07-A-849-P6; BACT
Total HAP	0.4 lb/hr ⁽⁴⁾	07-A-849-P6; 567 IAC 23.1(4)"b"

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}.

⁽²⁾ Concentration standard is expressed as VOC as ethanol.

⁽³⁾ Pound per hour standard is expressed as the total of individual VOC compounds.

⁽⁴⁾ Limit set as a result of the 112(g), "case-by-case" MACT standard.

Operational Limits, Requirements, & Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The pressure drop for the baghouse (EC-33) shall be maintained between 0.1 and 8.0 inches of H₂O.
 - a. The owner or operator shall properly operate and maintain equipment to continuously monitor the pressure drop of the baghouse. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating

- manual or per a written facility-specific operation and maintenance plan.
- b. The owner or operator shall collect the pressure drop for the baghouse, in inches of H₂O, a minimum of once per 15 minutes, and record the average per 8-hour period. This requirement shall not apply on the days that the baghouse or the equipment that the baghouse controls is not in operation.
 - c. Measured operating levels outside the permitted operating range will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
- B. The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications, or per written facility-specific operation and maintenance plan.
- a. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from response to the alarm system or to inspection/maintenance of the control equipment and the monitoring devices.
 - b. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process and remain shut down until repairs are completed, or continue to operate the process while taking opacity observations (following the procedures of 40 CFR 60 Appendix A, Method 9) to ensure that the opacity does not exceed the emission limits during the time of online repair.
- C. An alarm shall be installed which will alert the operator whenever the pressure drop varies outside the allowable range.

NESHAP Applicability:

These units are subject to the "case-by-case" MACT rule (40 CFR Part 63, Subpart B) and IAC 23.1(4)"b", as the plant is a major source.

Authority for Requirement: DNR Construction Permit 07-A-849-P6
567 IAC 23.1(4)"b"
40 CFR 63 Subpart B

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 111.5

Stack Opening, (inches, dia.): 26

Exhaust Flow Rate (scfm): 14,532

Exhaust Temperature (°F): 85

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 07-A-849-P6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-37

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-37	Germ Silo	EC-37 Dust Collector	Germ	9,000 ft ³	07-A-852-P5
EU-40a	Germ Bin Screw to Rail Loadout	EC-40 Dust Collector	Germ	300,000 lb/hr	
EU-40b	Germ Rail Loadout Drag		Germ	300,000 lb/hr	
EU-40c	Germ Rail Loadout Screw		Germ	116,000 lb/hr	
EU-40d	Germ Bin Screw to Truck Loadout		Germ	300,000 lb/hr	
EU-41a	Gluten Bin Discharge Screw	EC-41 Dust Collector	Gluten	300,000 lb/hr	
EU-41b	Gluten Loadout S-Path Drag		Gluten	300,000 lb/hr	
EU-41c	Gluten Loadout Screw		Gluten	167,000 lb/hr	

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

PSD Emission Limits

Pollutant	Limits	Reference (567 IAC)
Particulate Matter (PM)	0.004 gr/dscf ⁽¹⁾	BACT
PM ₁₀	0.004 gr/dscf ⁽¹⁾	BACT
Opacity	0% ⁽²⁾	BACT
Sulfur Dioxide (SO ₂)	5.00ppm _v ⁽¹⁾	BACT
Volatile Organic Compounds	5.00ppm _v ^(1, 3) and 0.56 lb/hr ^(1, 4)	BACT

¹ Standard is expressed as the average of three (3) runs.

² Standard is expressed as a six-minute average.

³ Concentration standard is expressed as VOC as ethanol.

⁴ Pound per hour standard is expressed as the total of individual VOC compounds.

Other Emission Limits

Pollutant	lb/hr ¹	tons/yr ²	Other Limits	Reference/Basis
Particulate Matter (PM) – State	NA	NA	0.1 gr/dscf ¹	567 IAC 23.4(7)
PM ₁₀	0.53 ³	NA	NA	NA
PM _{2.5}	0.20 ³	NA	NA	NA
Opacity	NA	NA	40%	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO ₂)	0.77 ³	NA	500 ppmv	567 IAC 23.3(3)"e"

(Total HAP)	0.16 ⁴	NA	NA	567 IAC 23.1(4)"b"
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¹ The emission limit is expressed as the average of three (3) runs.

² The emission limit is a twelve (12) month rolling total.

³ The limit is established to limit emissions below levels that predict exceedences of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}. The limit for SO₂ is established to limit emissions below levels that predict exceedences of the 3-hour, 24-hour and annual NAAQS and increment for SO₂.

⁴ Limit set as a result of the 112(g), "case-by-case" MACT standard.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The facility shall only loadout gluten produced on-site through EP-37.
- B. Record the source of the gluten that is loaded out through EP-37
- C. The pressure drop for each baghouse (EC-37, EC-40, and EC-41) shall be maintained between 0.1 and 8.0 inches of H₂O.
- D. An alarm shall be installed which will alert the operator whenever the pressure drop varies outside the allowable range.
- E. The owner or operator shall properly operate and maintain equipment to continuously monitor the pressure drop of the baghouse. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual or per a written facility-specific operation and maintenance plan.
- F. The owner or operator shall collect and the pressure drop for the baghouse, in inches of H₂O, a minimum of once per 15 minutes, and record the average per 8-hour period. This requirement shall not apply on the days that the baghouse or the equipment that the baghouse controls is not in operation.
- G. Measured operating levels outside the permitted operating range will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
- H. The owner or operator shall operate, inspect and maintain the control equipment according

to the manufacturer's specifications.

- I. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from response to the alarm system or to inspection/maintenance of the control equipment and the monitoring devices.
- J. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process and remain shut down until repairs are completed, or continue to operate the process while taking opacity observations (following the procedures of 40 CFR 60 Appendix A, Method 9) to ensure that the opacity does not exceed the emission limits during the time of online repair.

Authority for Requirement: DNR Construction Permit 07-A-852-P5

NESHAP Applicability:

These units are subject to the "case-by-case" MACT rule (40 CFR Part 63, Subpart B) and IAC 23.1(4)"b", as the plant is a major source.

Authority for Requirement: DNR Construction Permit 07-A-852-P5
567 IAC 23.1(4)"b"
40 CFR 63 Subpart B

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 111.55

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 8,000

Exhaust Temperature (°F): 90

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 07-A-852-P5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-38

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-38	Gluten Storage Bin	EC-38 Bin Vent Filter	Gluten	9,000 cubic feet	07-A-853-P5

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	07-A-853-P5; 567 IAC 23.3(2)"d"
	0%	07-A-853-P5; BACT
Particulate Matter (PM _{2.5})	0.006 lb/hr ⁽¹⁾	07-A-853-P5
Particulate Matter (PM ₁₀)	0.02 lb/hr ⁽¹⁾	07-A-853-P5
	0.004 gr/dscf	07-A-853-P5; BACT
Particulate Matter (PM)	0.1 gr/dscf	07-A-853-P5; 567 IAC 23.4(7)
	0.004 gr/dscf	07-A-853-P5; BACT
Sulfur Dioxide (SO ₂)	0.02 lb/hr ⁽¹⁾	07-A-853-P5
	500 ppmv	07-A-853-P5; 567 IAC 23.(3)"e"
	5.00 ppmv	07-A-853-P5; BACT
Volatile Organic Compounds (VOC)	20.00 ppmv ⁽²⁾	07-A-853-P5; BACT
	0.07 lb/hr ⁽³⁾	07-A-853-P5; BACT
Total HAP	0.017 lb/hr ⁽⁴⁾	07-A-853-P5; 23.1(4) "b"

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}.

⁽²⁾ Concentration standard is expressed as VOC as ethanol.

⁽³⁾ Pound per hour standard is expressed as the total of individual VOC compounds.

⁽⁴⁾ Limit set as a result of the 112(g), "case-by-case" MACT standard.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The owner or operator shall operate, inspect, and maintain the control equipment according to manufacturer's specifications.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall maintain a record of all daily checks, inspections, maintenance activities, and any actions resulting from the inspection/maintenance of the control equipment and the monitoring devices.
- B. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process and remain shut down until repairs are completed, or continue to operate the process while taking opacity observations (following the procedures of 40 CFR 60 Appendix A, Method 9) to ensure that the opacity does not exceed the emission limits during the time of online repair.

NESHAP Applicability:

This unit is subject to the "case-by-case" MACT rule (40 CFR Part 63, Subpart B) and IAC 23.1(4)"b", as the plant is a major source.

Authority for Requirement: DNR Construction Permit 07-A-853-P5
567 IAC 23.1(4)"b"
40 CFR 63 Subpart B

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 70

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 484

Exhaust Temperature (°F): 85

Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 07-A-853-P5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-43

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-35a	Fiber Cyclone	CE-35B	Fiber	40,000 lb/hr	07-A-857-P6
EU-43bb	Fiber Dryer No. 1 Feed Drag/ Product Condensers	Fiber Cooler Scrubber	Fiber	40,000 lb/hr	
EU-58	Steam Heated Germ Dryer No. 1	EC-58A, Germ Dryer	Germ	31,200 lb/hr	
EU-58b	Germ Cooler	No. 1	Germ	31,200 lb/hr	
EU-58c	Germ Dryer No. 1 Exhaust Cyclone	Scrubber	Germ	31,200 lb/hr	

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	07-A-857-P6; 567 IAC 23.3(2)"d"
	0%	07-A-857-P6; BACT
Particulate Matter (PM _{2.5})	0.95 lb/hr ⁽¹⁾	07-A-857-P6
	0.005 gr/dscf	07-A-857-P6; BACT
Particulate Matter (PM ₁₀)	2.50 lb/hr ⁽¹⁾	07-A-857-P6
	0.005 gr/dscf	07-A-857-P6; BACT
Particulate Matter (PM)	0.1 gr/dscf	07-A-857-P6; 567 IAC 23.4(7)
	0.005 gr/dscf	07-A-857-P6; BACT
Sulfur Dioxide (SO ₂)	5.43 lb/hr ⁽¹⁾⁽²⁾	07-A-857-P6; BACT
	500 ppmv	07-A-857-P6; 567 IAC 23.(3)"e"
	90% Reduction ⁽²⁾	07-A-857-P6; BACT
Volatile Organic Compounds (VOC)	25% Reduction ⁽³⁾	07-A-857-P6; BACT
	19.0 lb/hr ⁽²⁾	07-A-857-P6; BACT
Total HAP	2.30 lb/hr	07-A-857-P6; 567 IAC 23.1(4)"b"

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}. The limit for SO₂ emissions is established to limit emissions below levels that predict exceedances of the 3-hour, 24-hour and annual NAAQS and increment for SO₂.

⁽²⁾ Standard applies at all times.

⁽³⁾ Percent reduction standard applies only when inlet VOC concentration is greater than 220 ppmv.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The control equipment associated with this emission point shall be operated at all times any of the operations controlled by the devices is in operation.
- B. The germ dryer No. 1 scrubber, EC-58A, flowrate shall be maintained at or above 800 gallons per minute.
- C. The germ dryer No. 1 scrubber, EC-58A, scrubbant pH shall be maintained at a pH that is equal to or greater than the pH measured during the most recent performance test that demonstrates compliance with the permitted emission limits
- D. The fiber cooler scrubber, EC-35B, flowrate shall be maintained at or above 1,800 gallon/min.
- E. The fiber cooler scrubber, EC-35B, scrubbant pH shall be maintained at a pH that is equal to or greater than the pH measured during the most recent performance test that demonstrates compliance with the permitted emission limits.
- F. An alarm shall be installed which will alert the operator whenever the flowrate drops below the minimum allowed for either scrubber.
- G. The owner or operator shall properly operate and maintain equipment to continuously monitor the scrubbant flowrate for EC-35B and EC-58A, a minimum of once per 15 minutes, and record the average per 8-hour period. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan. This requirement shall not apply on the days that the equipment that the scrubber controls is not in operation
- H. The owner or operator shall properly operate and maintain equipment to periodically monitor the scrubbant pH for the scrubbers, EC-35B and EC-58A, a minimum of once per 15 minutes, and record the average per 8-hour period. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan. This requirement shall not apply on the days that the equipment that the scrubber controls is not in operation.
- I. Measured operating levels outside the permitted operating range will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
- J. The owner or operator shall maintain a record of the scrubbant pH observed for scrubbers, EC-35B and EC-58A, during the last successful compliance test for reference.

- K. The owner or operator shall operate, inspect, and maintain the control equipment according to the manufacturer's specifications.
- L. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment and the monitoring devices.

Authority for Requirement: DNR Construction Permit 07-A-857-P6

NESHAP Applicability:

These units are subject to the "case-by-case" MACT rule (40 CFR Part 63, Subpart B) and IAC 23.1(4)"b", as the plant is a major source.

Authority for Requirement: DNR Construction Permit 07-A-857-P6
567 IAC 23.1(4)"b"
40 CFR 63 Subpart B

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 200

Stack Opening, (inches, dia.): 72

Exhaust Flow Rate (scfm): 43,120

Exhaust Temperature (°F): 140

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 07-A-857-P6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is

observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of the violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

Stack Testing:

Pollutant - VOC

Stack Test to be Completed by (date) – November 26, 2019

Test Method - 40 CFR 60, Appendix A, Method 18 or 320

Authority for Requirement - 567 IAC 22.108(3)"b"

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-47

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Monitoring Equipment	Raw Material	Rated Capacity	Construction Permit
EU-47	Natural Gas Fired Boiler	EC-47 Low NO _x Burners and Flue Gas Recirculation	ME-FB2505	Natural Gas	245 MMBtu/hr	07-A-861-P5
EU-60	Process Heater No. 1	EC-60 Low NO _x Burners and Flue Gas Recirculation	ME-FH2250	Natural Gas	80 MMBtu/hr	

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	07-A-861-P5; 567 IAC 23.3(2)"d"
	0%	07-A-861-P5; BACT
Particulate Matter (PM _{2.5})	2.47 lb/hr ⁽¹⁾	07-A-861-P5
	0.0076 lb/MMBtu ⁽²⁾	07-A-861-P5; BACT
Particulate Matter (PM ₁₀)	2.47 lb/hr ⁽¹⁾	07-A-861-P5
	0.0076 lb/MMBtu ⁽²⁾	07-A-861-P5; BACT
Particulate Matter (PM)	0.6 lb/MMBtu	07-A-861-P5; 23.3.(2)"b"(3)
	0.0076 lb/MMBtu ⁽²⁾	07-A-861-P5; BACT
Sulfur Dioxide (SO ₂)	0.2 lb/hr ⁽¹⁾	07-A-861-P5
	0.0006 lb/MMBtu ⁽²⁾	07-A-861-P5; BACT
Nitrogen Oxides (NO _x)	13.0 lb/hr ⁽¹⁾	07-A-861-P5
	0.04 lb/MMBtu ⁽³⁾⁽⁴⁾	07-A-861-P5; BACT
	56.94 ton/yr ⁽⁶⁾	07-A-861-P5; BACT
	0.20 lb/MMBtu ⁽⁵⁾	07-A-861-P5; 40 CFR §60.44b(a)(1)
Volatile Organic Compounds (VOC)	0.005 lb/MMBtu ⁽²⁾	07-A-861-P5; BACT
Carbon Monoxide (CO)	26.0 lb/hr ⁽¹⁾	07-A-861-P5
	0.08 lb/MMBtu ⁽⁴⁾⁽⁷⁾	07-A-861-P5; BACT
	113.88 ton/yr ⁽⁶⁾	07-A-861-P5; BACT
Carbon Dioxide equivalents (CO _{2e})	167,711 ton/yr ⁽⁶⁾	07-A-861-P5; BACT

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}. The limit for SO₂ emissions is established to limit emissions below levels that predict exceedances of the 3-hour, 24-hour and annual NAAQS and increment for SO₂. The limit for NO_x emissions is established to limit emissions below levels that predict exceedances of the annual NAAQS and increment for NO_x. The limit for CO shows insignificant impact of the 1-hour and 8-hour NAAQS for CO.

⁽²⁾ Standard applies at all times.

⁽³⁾ Standard is expressed as a 30-day rolling average.

⁽⁴⁾ Standard applies at all times except during periods of start-up, shutdown, or malfunction.

- (5) The boiler is classified as a high heat release boiler. Standard applies at all times including periods of startup, shutdown and malfunction (40 CFR§60.44b(h)). Compliance is determined on a 30-day rolling average basis. (40 CFR§60.44b(i)). This limit applies to the boiler only.
- (6) The NO_x, CO and CO_{2e} ton per year standards apply at all times including during periods of startup, shutdown and malfunction.
- (7) Standard is expressed as a 24-hour rolling average.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The boiler and the process heater shall combust only natural gas.
- B. The owner or operator shall perform an annual tune-up and a one-time energy assessment performed by a qualified energy assessor.
- C. The owner or operator shall develop and implement a written startup, shutdown and malfunction plan (SSMP) for the boiler and the process heater. The plan shall include:
 - i. Procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and
 - ii. Corrective action plans for a malfunctioning process, air pollution control, and monitoring equipment.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall maintain records of the amount of fuel combusted each day for the boiler and process heater individually, according to 40 CFR §60.49b and 40 CFR §60.48c(g)(1).
- B. The owner or operator shall follow the notification, recordkeeping and reporting requirements of 40 CFR §60.49b for the boiler.
- C. The owner or operator shall maintain records of the following information for each steam generating unit operating day for the boiler per 40 CFR §60.49b:
 - i. Calendar date.
 - ii. The average hourly nitrogen oxides emission rates (expressed as NO₂) (ng/J or lb/million Btu heat input) measured or predicted.
 - iii. The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
 - iv. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.

- v. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
 - vi. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
 - vii. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - viii. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
 - ix. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
 - x. Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.
- D. The owner or operator shall submit excess emission reports for any excess emissions that occurred during the reporting period per 40 CFR §60.49b for the boiler.
- E. Per 40 CFR §60.49b(r)(1), the owner or operator shall obtain and maintain at the affected facility fuel receipts from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas as defined in §60.41b and the applicable sulfur limit.
- F. The owner or operator shall maintain a fuel certification for the fuel burned in the process heater per 40 CFR §60.48c(f):
- i. The name of the supplier of the fuel;
 - ii. The potential sulfur emissions rate of the fuel in ng/J heat input; and
 - iii. The method used to determine the potential sulfur emissions rate of the fuel.
- G. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment and the monitoring devices.
- H. The owner or operator shall keep records of the most recent test results for methane (CH₄) and nitrous oxide (N₂O), and use the results of the stack tests along with the CEM data for CO₂ to calculate a rolling twelve month total CO_{2e} for EU-47 and EU-60 combined. The Global Warming Potential (GWP) for methane shall be 21 and the GWP for nitrous oxide shall be 310. This calculation shall be updated monthly.

NSPS & NESHAP Applicability:

The boiler is subject to Subpart A – General Provisions (40 CFR §60.1 through 40 CFR §60.19) of the New Source Performance Standards (NSPS) and Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (40 CFR §60.40b through 40 CFR §60.49b) and is also subject to the requirements of 567 IAC 23.1(2)"ccc".

The process heater is subject to Subpart A – General Provisions (40 CFR §60.1 through 40 CFR §60.19) of the New Source Performance Standards (NSPS) and Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR §60.40c through 40 CFR §60.49c) and is also subject to the requirements of 567 IAC 23.1(2)"III".

These units are subject to Subpart A – General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters (40 CFR §63.7480 through 40 CFR §63.7575) as existing units designed to burn gas 1.

Authority for Requirement: DNR Construction Permit 07-A-861-P5
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db
567 IAC 23.1(2)"III"
40 CFR 60 Subpart Dc
40 CFR 63 Subpart DDDDD

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 198
Stack Opening, (inches, dia.): 84
Exhaust Flow Rate (scfm): 74,588
Exhaust Temperature (°F): 330
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 07-A-861-P5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Continuous Emissions Monitoring:

Pollutant - NO_x
Operational Specifications – 40 CFR Part 60 Appendix B
Date of Initial System Calibration and Quality Assurance – July 30, 2014
Reporting & Recordkeeping - 40 CFR Part 60 Appendix B
Authority for Requirement - DNR Construction Permit 07-A-861-P5

Pollutant - CO
Operational Specifications – 40 CFR Part 60 Appendix B
Date of Initial System Calibration and Quality Assurance - July 30, 2014
Reporting & Recordkeeping - 40 CFR Part 75
Authority for Requirement - DNR Construction Permit 07-A-861-P5

Pollutant – CO₂

Operational Specifications – 40 CFR Part 60 Appendix B

Date of Initial System Calibration and Quality Assurance - July 30, 2014

Reporting & Recordkeeping - 40 CFR Part 60 Appendix B

Authority for Requirement - DNR Construction Permit 07-A-861-P5

The owner or operator shall demonstrate compliance with the nitrogen oxide emission limits for the boiler through the use of a continuous emission monitoring system (CEMS). The facility shall install, calibrate, maintain, and operate a CEMS for measuring nitrogen oxides emissions discharged from the boiler to the atmosphere. The CEM shall be installed, evaluated, operated and data collected to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2). The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

The owner or operator shall demonstrate compliance with the nitrogen oxide emission limits for the process heater through the use of a continuous emission monitoring system (CEMS). The facility shall install, calibrate, maintain, and operate a CEMS for measuring nitrogen oxides emissions discharged from the process heater to the atmosphere. The CEM shall be installed, evaluated, operated and data collected to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2). The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

The owner or operator shall demonstrate compliance with the carbon monoxide emission limits for the boiler and process heater through the use of a continuous emission monitoring system (CEMS). Separate CEMS may be used for the boiler and process heater. The CEM shall be installed, evaluated, operated and data collected to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 (PS4). The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

The owner or operator shall demonstrate compliance with the carbon dioxide emission limits for the boiler and process heater through the use of a continuous emission monitoring system (CEMS). Separate CEMS may be used for the boiler and process heater. Therefore, the facility shall install, calibrate, maintain, and operate a CEMS for measuring CO₂ emissions discharged to the atmosphere and record the output of the system. The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 3 (PS3) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

All continuous monitoring systems (CMS) required by this permit shall be operated and data recorded during all periods of operation of the boiler or process heater except for CMS breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span adjustments

If requested by the Department, the owner/operator shall coordinate the quarterly cylinder gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.

The procedures under 40 CFR §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-49

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-49	HCl Storage Tanks No. 1 and 2	EC-49 Wet Scrubber	HCl	29,000 gallons each	07-A-862-P5

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	07-A-862-P5; 567 IAC 23.3(2)"d"
Hydrochloric Acid (HCl)	0.048 ton/yr ⁽¹⁾	07-A-862-P5; 567 IAC 23.1(4)"b"

⁽¹⁾ For the "case-by-case" MACT rule (40 CFR Part 63, Subpart B). Limit is based on assumed scrubber control efficiency of 90% and an annual throughput of 1,073,500 gallons per year.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The control equipment (Scrubber EC-49) shall be operated at all times the storage tanks are being filled.
- B. The scrubber (EC-49) liquor flowrate shall be maintained at or above 21 gallons per minute.
- C. An alarm shall be installed which will alert the operator whenever the flowrate drops below the minimum allowed.
- D. The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall properly operate and maintain equipment to continuously monitor the scrubbant flowrate a minimum of once per 15 minutes during operation, and record the average per tank filling. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan. This requirement shall not apply on the days that the equipment that the scrubber controls is not in operation.

- B. The owner or operator shall monitor and record the pressure drop during startup, and evaluate the result against expected operating characteristics during normal scrubber operation at that time. If this is not done manually, the monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from the alarms or inspection/maintenance of the control equipment and the monitoring devices.

NESHAP Applicability:

These units are subject to the "case-by-case" MACT rule (40 CFR Part 63, Subpart B) and IAC 23.1(4)"b", as the plant is a major source.

Authority for Requirement: DNR Construction Permit 07-A-862-P5
567 IAC 23.1(4)"b"
40 CFR 63 Subpart B

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 45

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): 1,459

Exhaust Temperature (°F): 85

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 07-A-862-P5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-51

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-51	Salt Silo	EC-51 Bin Vent Filter	Salt	1,000 cubic ft	07-A-864-P3

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40% ⁽¹⁾	07-A-864-P3; 567 IAC 23.3(2)"d"
	0%	07-A-864-P3; BACT
Particulate Matter (PM ₁₀)	0.078 lb/hr ⁽²⁾	07-A-864-P3
	0.005 gr/dscf	07-A-864-P3; BACT
Particulate Matter (PM)	0.1 gr/dscf	07-A-864-P3; 23.3.(2)"a"
	0.005 gr/dscf	07-A-864-P3; BACT

⁽¹⁾ Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The limit is established to limit emissions below levels that predict exceedances of the 24-hour NAAQS, the 24-hour increment, and the annual increment limit.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The owner or operator shall furnish the Department with final detailed plans and specifications for all emission control equipment selected by the owner to meet the emission limits contained in Permit 07-A-864-P3. In addition, the facility shall detail all revisions made to the affected emission units. This information shall be submitted to the Department at least 30 days in advance of construction of any control equipment.
- B. The owner or operator shall operate, inspect, and maintain the control equipment according to manufacturer's specifications.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall maintain a record of all daily checks, inspections, maintenance activities, and any actions resulting from the inspection/maintenance of the control equipment and the monitoring devices.
- B. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process and remain shut down until repairs are completed, or continue to operate the process while taking opacity observations (following the procedures of 40 CFR 60 Appendix A, Method 9) to ensure that the opacity does not exceed the emission limits during the time of online repair.

Authority for Requirement: DNR Construction Permit 07-A-864-P3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 6

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (scfm): 1,859

Exhaust Temperature (°F): 85

Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 07-A-864-P3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐
(Facility O&M Required for EC-51)

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: EP-52, EP-53, EP-54, EP-55

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP-52	EU-52	Cooling Tower Cell No. 1	EC-52 Drift Eliminator	Water	11,000 gal/min	07-A-865-P4
EP-53	EU-53	Cooling Tower Cell No. 2	EC-53 Drift Eliminator	Water	11,000 gal/min	07-A-866-P4
EP-54	EU-54	Cooling Tower Cell No. 3	EC-54 Drift Eliminator	Water	11,000 gal/min	07-A-867-P4
EP-55	EU-55	Cooling Tower Cell No. 4	EC-55 Drift Eliminator	Water	11,000 gal/min	07-A-868-P5

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	07-A-865-P4; 07-A-866-P4; 07-A-867-P4; 07-A-868-P5; 567 IAC 23.3(2)"d"
	0%	07-A-865-P4; 07-A-866-P4; 07-A-867-P4; 07-A-868-P5; BACT
Particulate Matter (PM _{2.5})	0.052 lb/hr ⁽¹⁾	07-A-865-P4; 07-A-866-P4; 07-A-867-P4; 07-A-868-P5
Particulate Matter (PM ₁₀)	0.14 lb/hr ⁽¹⁾	07-A-865-P4; 07-A-866-P4; 07-A-867-P4; 07-A-868-P5
	0.0005% ⁽²⁾	07-A-865-P4; 07-A-866-P4; 07-A-867-P4; 07-A-868-P5; BACT
Particulate Matter (PM)	0.1 gr/dscf	07-A-865-P4; 07-A-866-P4; 07-A-867-P4; 07-A-868-P5; 23.3.(2)"a"
	0.0005% ⁽²⁾	07-A-865-P4; 07-A-866-P4; 07-A-867-P4; 07-A-868-P5; BACT

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}.

⁽²⁾ This is the required control efficiency of the drift eliminator in gallons of drift per gallon of cooling water flow.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- The circulating water in the cooling tower shall not exceed 5,000 parts per million by weight (ppm_w) (5,000 mg/L) total dissolved solids (TDS).
- Chromium based, VOC or HAP containing water treatment chemicals shall not be used in this emission unit.
- The owner or operator shall maintain the cooling tower drift eliminators according to manufacturer's specifications, instructions and maintenance schedule.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall monitor the TDS concentration of the circulating water in the cooling tower via either 15(A)(1) or 15(A)(2):
 - i. The owner or operator shall complete an analysis of the TDS of the water in the cooling tower at least once for each calendar month this emission unit is in operation; or
 - ii. The owner or operator shall measure the electrical conductivity of the cooling water to determine the Total Dissolved Solids (TDS) on a continuous basis. If measuring electrical conductivity, the owner or operator is required to take one water sample per week over the first two months (8 samples total) to determine the relationship between the TDS and electrical conductivity for that sample. The average of the 8 determined TDS/conductivity relationships and the measured electrical conductivity value shall be used to determine compliance with allowable TDS concentration. During the first two months of operation, the results of the TDS analysis needed to develop this relationship will be used to determine compliance with the applicable limit. The owner or operator shall install, operate and maintain a meter to measure the electrical conductivity of the cooling water on a continuous basis. The output of this monitoring device shall be converted to ppm_w of TDS and recorded on a continuous basis.
- B. The owner or operator shall maintain a record of the manufacturer's drift loss guarantee for the cooling tower drift eliminators.
- C. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the cooling tower.

NESHAP Applicability:

Each emission unit is subject to 40 CFR Subpart 63 Subpart A – General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF –National Emission Standards for Hazardous Air Pollutant: Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550) and is also subject to the requirements of 567 IAC 23.1(4)"cf". The heat exchange system is considered part of the MCPU, but as the recirculating heat exchange system contains less than 5% by weight of total HAP, no monitoring is required.

Authority for Requirement: DNR Construction Permits 07-A-865-P4, 07-A-866-P4,
07-A-867-P4, 07-A-868-P5
567 IAC 23.1(4)"cf"
40 Subpart 63 Subpart FFFF

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 39

Stack Opening, (inches, dia.): 360

Exhaust Flow Rate (scfm): 883,434

Exhaust Temperature (°F): 120

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 07-A-865-P4, 07-A-866-P4,
07-A-867-P4, 07-A-868-P5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-56

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-56	Emergency Generator No. 1	-	Diesel	905 kW	07-A-869-P5

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	07-A-869-P5; 567 IAC 23.3(2)"d"
	5% ⁽¹⁾	07-A-869-P5; BACT
	20% ⁽²⁾	07-A-869-P5; 40 CFR §89.113 NSPS Subpart IIII
	15% ⁽³⁾	07-A-869-P5; 40 CFR §89.113 NSPS Subpart IIII
	50% ⁽⁴⁾	07-A-869-P5; 40 CFR §89.113 NSPS Subpart IIII
Particulate Matter (PM ₁₀)	0.40 lb/hr ⁽⁵⁾	07-A-869-P5
	0.20 g/kW-hr	07-A-869-P5; BACT
	0.10 ton/yr ⁽⁶⁾	07-A-869-P5; BACT
Particulate Matter (PM)	0.20 g/kW-hr	07-A-869-P5; BACT
	0.10 ton/yr ⁽⁶⁾	07-A-869-P5; BACT
Particulate Matter (PM) – Filterable Only	0.20 g/kW-hr	07-A-869-P5; 40 CFR §89.112(a) NSPS Subpart IIII
Sulfur Dioxide (SO ₂)	0.46 lb/hr ⁽⁵⁾	07-A-869-P5
	2.5 lb/MMBtu	07-A-869-P5; 567 IAC 23.3(3)
	0.23 g/kW-hr ⁽⁷⁾	07-A-869-P5; BACT
	0.11 ton/yr ⁽⁶⁾	07-A-869-P5; BACT
Fuel Sulfur Requirements beginning 10/01/2010	Max 15 ppm Sulfur and Min Cetane Index = 40 or Max Aromatic content = 35% _{vol}	07-A-869-P5; 40 CFR §80.510(b)
Nitrogen Oxides (NO _x)	12.38 lb/hr ⁽⁵⁾	07-A-869-P5
	6.2 g/kW-hr	07-A-869-P5; BACT
	3.09 ton/yr ⁽⁶⁾	07-A-869-P5; BACT
Nitrogen Oxides (NO _x) + Non-Methane Hydrocarbons (NMHC)	6.4 g/kW-hr	07-A-869-P5; 40 CFR §89.112(a) NSPS Subpart IIII
Volatile Organic Compounds (VOC)	0.2 g/kW-hr	07-A-869-P5; BACT
	0.10 ton/yr ⁽⁶⁾	07-A-869-P5; BACT
Carbon Monoxide (CO)	6.99 lb/hr ⁽⁵⁾	07-A-869-P5
	3.5 g/kW-hr	07-A-869-P5; BACT; 40 CFR §89.112(a) NSPS Subpart IIII
	1.75 ton/yr ⁽⁶⁾	07-A-869-P5; BACT

⁽¹⁾ Applies only during normal operation. A standard of 20% opacity applies during times of start-up, shutdown and malfunction.

⁽²⁾ Acceleration Mode

(3) Lugging Mode

(4) Peaks in Acceleration or Lugging Mode

(5) The limit for PM₁₀ emissions is established to limit emissions below levels that predict exceedances of the 24-hour NAAQS, the annual NAAQS, the 24-hour increment and the annual increment for PM₁₀. The limit for SO₂ emissions is established to limit emissions below levels that predict exceedances of the 3-hour, 24-hour and annual NAAQS and increment for SO₂. The limit for NO_x emissions is established to limit emissions below levels that predict exceedances of the annual NAAQS and increment for NO_x. The limit for CO shows an insignificant impact of the 1-hour and 8-hour NAAQS for CO.

(6) Ton per year limits correlate to an operating limit of 500 hour per year

(7) Standard corresponds to the use of diesel fuel containing no more than 0.05% by weight sulfur.

Operational Limits, Requirements, & Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Emergency Generator No. 1, EU-56, shall operate only in emergency situations or as provided for in Conditions F and G below.
- B. Emergency Generator No. 1, EU-56, shall not operate more than 500 hours per rolling twelve-month period.
- C. The owner or operator of Emergency Generator No. 1, EU-56, shall install a non-resettable hour meter prior to startup of the engine per 40 CFR§60.4209.
- D. The owner or operator shall record each month the total hours of operation for Emergency Generator No. 1, EU-56, and the reason the Emergency Generator was operated. Calculate and record rolling twelve-month totals.
- E. Per 40 CFR§60.4211(c), the engine must be installed and configured according to manufacturer's specifications.
- F. Per 40 CFR§60.4211, Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine for a maximum of 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.
- G. Per 40 CFR§63.6675, Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed on or after June 12, 2006, must comply with requirements specified in 40 CFR 60.4243(d) which states that emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- H. Emergency Generator No. 1, EU-56, shall be limited to using diesel fuel with a maximum sulfur content not to exceed 0.05% by weight.
- I. Beginning October 1, 2010, diesel fuel fired in Emergency Generator No. 1 shall be limited to a maximum sulfur content of 15 ppm and a minimum cetane index of 40 or a maximum aromatic content of 30 percent by volume per 40 CFR§80.510(b).

- J. The owner or operator shall maintain records of the sulfur content of the diesel fuel utilized in Emergency Generator No. 1, EU-56.
- K. Per 40 CFR§60.4207, owners and operators of pre-2011 model year diesel generators subject to NSPS Subpart IIII may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of 40 CFR§80.510(a) or CFR§80.510(b) beyond the dates required, for the purpose of using up existing fuel inventories.
- L. The owner or operator of Emergency Generator No. 1, EU-56, shall follow the monitoring requirements of 40 CFR§60.4209.
- M. The owner or operator of Emergency Generator No. 1, EU-56, shall follow the compliance requirements of 40 CFR§60.4211.
- N. The owner or operator of Emergency Generator No. 1, EU-56, shall follow the notification, reporting, and recordkeeping requirements of 40 CFR§60.4214(b).

Authority for Requirement: DNR Construction Permit 07-A-869-P5

NSPS & NESHAP Applicability:

This emission unit is subject to the New Source Performance Standards (NSPS) Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR §60.4200 through 40 CFR §60.4219) and to NSPS Subpart A - General Provisions (40 CFR §60.1 through 40 CFR §60.19) and is also subject to the requirements of 567 IAC 23.1(2)"yyy".

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR §63.6590(a)(2)(i) this emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after December 19, 2002.

According to 40 CFR §63.6590(b)(1)(i), a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A except for initial notification requirements of 40 CFR §63.6645(f).

Authority for Requirement: DNR Construction Permit 07-A-869-P5
40 CFR Part 60 Subpart IIII
567 IAC 23.1(2)"yyy"
40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 10

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): 1,965

Exhaust Temperature (°F): 965

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 07-A-869-P5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-57

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-57	Fire Water Pump Diesel Engine	-	Diesel	510 hp	07-A-870-P6

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	07-A-870-P6; 567 IAC 23.3(2)"d"
	5% ⁽¹⁾	07-A-870-P6; BACT
Particulate Matter (PM _{2.5})	0.19 lb/hr	07-A-870-P6
Particulate Matter (PM ₁₀)	0.07 lb/hr ⁽²⁾	07-A-870-P6
	0.08 g/kW-hr	07-A-870-P6; BACT
	0.017 ton/yr ⁽³⁾	07-A-870-P6; BACT
Particulate Matter (PM)	0.08 g/kW-hr	07-A-870-P6; BACT
	0.017 ton/yr ⁽³⁾	07-A-870-P6; BACT
Particulate Matter (PM) – Filterable Only	0.54 g/kW-hr	07-A-870-P6; 40 CFR §89.112(a) NSPS Subpart IIII
Sulfur Dioxide (SO ₂)	0.19 lb/hr ⁽²⁾	07-A-870-P6
	2.5 lb/MMBtu	07-A-870-P6; 567 IAC 23.3(3)
	0.23 g/kW-hr ⁽⁴⁾	07-A-870-P6; BACT
	0.05 ton/yr ⁽³⁾	07-A-870-P6; BACT
Fuel Sulfur Requirements beginning 10/01/2010	Max 15 ppm Sulfur and Min Cetane Index = 40 or Max Aromatic content = 35% _{vol}	07-A-870-P6; 40 CFR §80.510(b)
Nitrogen Oxides (NO _x)	5.40 lb/hr ⁽²⁾	07-A-870-P6
	6.45 g/kW-hr	07-A-870-P6; BACT
	1.35 ton/yr ⁽³⁾	07-A-870-P6; BACT
Nitrogen Oxides (NO _x) + Non-Methane Hydrocarbons (NMHC)	10.5 g/kW-hr	07-A-870-P6; 40 CFR §89.112(a) NSPS Subpart IIII
Volatile Organic Compounds (VOC)	0.1 g/kW-hr	07-A-870-P6; BACT
	0.025 ton/yr ⁽³⁾	07-A-870-P6; BACT
Carbon Monoxide (CO)	0.53 lb/hr ⁽²⁾	07-A-870-P6
	3.5 g/kW-hr	07-A-870-P6; 40 CFR §89.112(a) NSPS Subpart IIII
	0.63 g/kW-hr	07-A-870-P6; BACT
	0.13 ton/yr ⁽³⁾	07-A-870-P6; BACT

⁽¹⁾ Applies only during normal operation. A standard of 20% opacity applies during times of start-up, shutdown and malfunction.

⁽²⁾ The limit for PM₁₀ emissions is established to limit emissions below levels that predict exceedances of the 24-hour NAAQS, the annual NAAQS, the 24-hour increment and the annual increment for PM₁₀. The limit for SO₂ emissions is established to limit emissions below levels that predict exceedances of the 3-hour, 24- hour and annual NAAQS and increment for SO₂. The limit for

NO_x emissions is established to limit emissions below levels that predict exceedances of the annual NAAQS and increment for NO_x. The limit for CO shows an insignificant impact of the 1-hour and 8-hour NAAQS for CO.

(3) Ton per year limits correlate to an operating limit of 500 hour per year.

(4) Standard corresponds to the use of diesel fuel containing no more than 0.05% by weight sulfur.

Operational Limits, Requirements, & Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Fire Water Pump Diesel Engine, EU-57, shall operate only in emergency situations or as provided for in Conditions F and G below.
- B. Fire Water Pump Diesel Engine, EU-57, shall not operate more than 500 hours per rolling twelve-month period.
- C. The owner or operator of Fire Water Pump Diesel Engine, EU-57, shall install a non-resettable hour meter prior to startup of the engine per 40 CFR§60.4209.
- D. The owner or operator shall record each month the total hours of operation for Fire Water Pump Diesel Engine, EU-57, and the reason the Emergency Generator was operated. Calculate and record rolling twelve-month totals.
- E. Per 40 CFR§60.4211(c), the engine must be installed and configured according to manufacturer's specifications.
- F. Per 40 CFR§60.4211, Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine for a maximum of 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.
- G. Per 40 CFR§63.6675, Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed on or after June 12, 2006, must comply with requirements specified in 40 CFR 60.4243(d) which states that emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- H. Fire Water Pump Diesel Engine, EU-57, shall be limited to using diesel fuel with a maximum sulfur content not to exceed 0.05% by weight.
- I. Beginning October 1, 2010, diesel fuel fired in Fire Water Pump Diesel Engine, EU-57, shall be limited to a maximum sulfur content of 15 ppm and a minimum cetane index of 40 or a maximum aromatic content of 30 percent by volume per 40 CFR§80.510(b).
- J. The owner or operator shall maintain records of the sulfur content of the diesel fuel utilized in Fire Water Pump Diesel Engine, EU-57.
- K. Per 40 CFR§60.4207, owners and operators of pre-2011 model year diesel generators subject to NSPS Subpart IIII may petition the Administrator for approval to use remaining

non-compliant fuel that does not meet the fuel requirements of 40 CFR§80.510(a) or CFR§80.510(b) beyond the dates required, for the purpose of using up existing fuel inventories.

- L. The owner or operator of Fire Water Pump Diesel Engine, EU-57, shall follow the compliance requirements of 40 CFR§60.4211.
- M. The owner or operator of Fire Water Pump Diesel Engine, EU-57, shall follow the notification, reporting, and recordkeeping requirements of 40 CFR§60.4214(b).

Authority for Requirement: DNR Construction Permit 07-A-870-P6

NSPS & NESHAP Applicability:

This emission unit is subject to the New Source Performance Standards (NSPS) Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR §60.4200 through 40 CFR §60.4219) and to NSPS Subpart A - General Provisions (40 CFR §60.1 through 40 CFR §60.19) and is also subject to the requirements of 567 IAC 23.1(2)"yyy" as an engine manufactured on 7/1/2008.

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(i) this emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after December 19, 2002.

According to 40 CFR 63.6590(b)(1)(i), a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A except for initial notification requirements of 40 CFR 63.6645(f).

Authority for Requirement: DNR Construction Permit 07-A-870-P6
40 CFR Part 60 Subpart IIII
567 IAC 23.1(2)"yyy"
40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 22

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (scfm): 1,018

Exhaust Temperature (°F): 860

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 07-A-870-P6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-63

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-63	Emergency Generator No. 2	-	Diesel	905 kW	08-A-454-P4

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	08-A-454-P4; 567 IAC 23.3(2)"d"
	5% ⁽¹⁾	08-A-454-P4; BACT
	20% ⁽²⁾	08-A-454-P4; 40 CFR §89.113 NSPS Subpart IIII
	15% ⁽³⁾	08-A-454-P4; 40 CFR §89.113 NSPS Subpart IIII
	50% ⁽⁴⁾	08-A-454-P4; 40 CFR §89.113 NSPS Subpart IIII
Particulate Matter (PM ₁₀)	0.40 lb/hr ⁽⁵⁾	08-A-454-P4
	0.20 g/kW-hr	08-A-454-P4; BACT
	0.10 ton/yr ⁽⁶⁾	08-A-454-P4; BACT
Particulate Matter (PM)	0.20 g/kW-hr	08-A-454-P4; BACT
	0.10 ton/yr ⁽⁶⁾	08-A-454-P4; BACT
Particulate Matter (PM) – Filterable Only	0.20 g/kW-hr	08-A-454-P4; 40 CFR §89.112(a) NSPS Subpart IIII
Sulfur Dioxide (SO ₂)	0.46 lb/hr ⁽⁵⁾	08-A-454-P4
	2.5 lb/MMBtu	08-A-454-P4; 567 IAC 23.3(3)
	0.23 g/kW-hr ⁽⁷⁾	08-A-454-P4; BACT
	0.11 ton/yr ⁽⁶⁾	08-A-454-P4; BACT
Fuel Sulfur Requirements beginning 10/01/2010	Max 15 ppm Sulfur and Min Cetane Index = 40 or Max Aromatic content = 35% _{vol}	08-A-454-P4; 40 CFR §80.510(b)
Nitrogen Oxides (NO _x)	12.38 lb/hr ⁽⁵⁾	08-A-454-P4
	6.2 g/kW-hr	08-A-454-P4; BACT
	3.09 ton/yr ⁽⁶⁾	08-A-454-P4; BACT
Nitrogen Oxides (NO _x) + Non-Methane Hydrocarbons (NMHC)	6.4 g/kW-hr	08-A-454-P4; 40 CFR §89.112(a) NSPS Subpart IIII
Volatile Organic Compounds (VOC)	0.2 g/kW-hr	08-A-454-P4; BACT
	0.10 ton/yr ⁽⁶⁾	08-A-454-P4; BACT
Carbon Monoxide (CO)	6.99 lb/hr ⁽⁵⁾	08-A-454-P4
	3.5 g/kW-hr	08-A-454-P4; BACT; 40 CFR §89.112(a) NSPS Subpart IIII
	1.75 ton/yr ⁽⁶⁾	08-A-454-P4; BACT

⁽¹⁾ Applies only during normal operation. A standard of 20% opacity applies during times of start-up, shutdown and malfunction.

- (2) Acceleration Mode
- (3) Lugging Mode
- (4) Peaks in Acceleration or Lugging Mode
- (5) The limit for PM₁₀ emissions is established to limit emissions below levels that predict exceedances of the 24-hour NAAQS, the annual NAAQS, the 24-hour increment and the annual increment for PM₁₀. The limit for SO₂ emissions is established to limit emissions below levels that predict exceedances of the 3-hour, 24-hour and annual NAAQS and increment for SO₂. The limit for NO_x emissions is established to limit emissions below levels that predict exceedances of the annual NAAQS and increment for NO_x. The limit for CO shows an insignificant impact of the 1-hour and 8-hour NAAQS for CO.
- (6) Ton per year limits correlate to an operating limit of 500 hour per year
- (7) Standard corresponds to the use of diesel fuel containing no more than 0.05% by weight sulfur.

Operational Limits, Requirements, & Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Emergency Generator No. 2, EU-63, shall operate only in emergency situations or as provided for in Conditions F and G below.
- B. Emergency Generator No. 2, EU-63, shall not operate more than 500 hours per rolling twelve-month period.
- C. The owner or operator of Emergency Generator No. 2, EU-63, shall install a non-resettable hour meter prior to startup of the engine per 40 CFR§60.4209.
- D. The owner or operator shall record each month the total hours of operation for Emergency Generator No. 2, EU-63, and the reason the Emergency Generator was operated. Calculate and record rolling twelve-month totals.
- E. Per 40 CFR§60.4211(c), the engine must be installed and configured according to manufacturer's specifications.
- F. Per 40 CFR§60.4211, Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine for a maximum of 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.
- G. Per 40 CFR§63.6675, Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed on or after June 12, 2006, must comply with requirements specified in 40 CFR 60.4243(d) which states that emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- H. Emergency Generator No. 2, EU-63, shall be limited to using diesel fuel with a maximum sulfur content not to exceed 0.05% by weight.
- I. Beginning October 1, 2010, diesel fuel fired in Emergency Generator No. 2 shall be limited to a maximum sulfur content of 15 ppm and a minimum cetane index of 40 or a maximum aromatic content of 30 percent by volume per 40 CFR§80.510(b).

- J. The owner or operator shall maintain records of the sulfur content of the diesel fuel utilized in Emergency Generator No. 2, EU-63.
- K. Per 40 CFR§60.4207, owners and operators of pre-2011 model year diesel generators subject to NSPS Subpart IIII may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of 40 CFR§80.510(a) or CFR§80.510(b) beyond the dates required, for the purpose of using up existing fuel inventories.
- L. The owner or operator of Emergency Generator No. 2, EU-63, shall follow the monitoring requirements of 40 CFR§60.4209.
- M. The owner or operator of Emergency Generator No. 2, EU-63, shall follow the compliance requirements of 40 CFR§60.4211.
- N. The owner or operator of Emergency Generator No. 2, EU-63, shall follow the notification, reporting, and recordkeeping requirements of 40 CFR§60.4214(b).

NSPS & NESHAP Applicability:

This emission unit is subject to the New Source Performance Standards (NSPS) Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR §60.4200 through 40 CFR §60.4219) and to NSPS Subpart A - General Provisions (40 CFR §60.1 through 40 CFR §60.19) and is also subject to the requirements of 567 IAC 23.1(2)"yyy".

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(i) this emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after December 19, 2002.

According to 40 CFR 63.6590(b)(1)(i), a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A except for initial notification requirements of 40 CFR 63.6645(f).

Authority for Requirement: DNR Construction Permit 08-A-454-P4
40 CFR Part 60 Subpart III
567 IAC 23.1(2)"yyy"
40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 10

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): 1,965

Exhaust Temperature (°F): 965

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 08-A-454-P4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-81

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-81	Cracked Corn Receiver	EC-81 Dust Collector	Cracked Corn	60,000 lb/hr	12-A-152-P1

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	12-A-152-P1; 567 IAC 23.3(2)"d"
	0%	12-A-152-P1; BACT
Particulate Matter (PM _{2.5})	0.005 lb/hr ⁽¹⁾	12-A-152-P1
	0.002 gr/dscf	12-A-152-P1; BACT
Particulate Matter (PM ₁₀)	0.081 lb/hr ⁽¹⁾	12-A-152-P1
	0.004 gr/dscf	12-A-152-P1; BACT
Particulate Matter (PM)	0.1 gr/dscf	12-A-152-P1; 567 IAC 23.4(7)
	0.004 gr/dscf	12-A-152-P1; BACT

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- The pressure drop for the dust collector shall be maintained between 0.1 and 8.0 inches of H₂O.
- An alarm shall be installed which will alert the operator whenever the pressure drop varies outside the allowable range.
- The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- The owner or operator shall properly operate and maintain equipment to continuously monitor the pressure drop of the baghouse. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual or per a written facility-specific operation and maintenance plan.

- B. The owner or operator shall collect the pressure drop for the baghouse, in inches of H₂O, a minimum of once per 15 minutes, and record the average per 8-hour period. This requirement shall not apply on the days that the baghouse or the equipment that the baghouse controls is not in operation.
- C. Measured operating levels outside the permitted operating range will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
- D. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from response to the alarm system or to inspection/maintenance of the control equipment and the monitoring devices.
- E. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process and remain shut down until repairs are completed, or continue to operate the process while taking opacity observations (following the procedures of 40 CFR 60 Appendix A, Method 9) to ensure that the opacity does not exceed the emission limits during the time of online repair.

Authority for Requirement: DNR Construction Permit 12-A-152-P1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 124

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 2,357

Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 12-A-152-P1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-82

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-82	Dry Ingredients Receiver	EC-82 Dust Collector	Dry Ingredients	80,000 lb/hr	12-A-153-P1

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	12-A-153-P1; 567 IAC 23.3(2)"d"
	0%	12-A-153-P1; BACT
Particulate Matter (PM _{2.5})	0.005 lb/hr ⁽¹⁾	12-A-153-P1
	0.002 gr/dscf	12-A-153-P1; BACT
Particulate Matter (PM ₁₀)	0.081 lb/hr ⁽¹⁾	12-A-153-P1
	0.004 gr/dscf	12-A-153-P1; BACT
Particulate Matter (PM)	0.1 gr/dscf	12-A-153-P1; 567 IAC 23.4(7)
	0.004 gr/dscf	12-A-153-P1; BACT

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- The pressure drop for the dust collector shall be maintained between 0.1 and 8.0 inches of H₂O.
- An alarm shall be installed which will alert the operator whenever the pressure drop varies outside the allowable range.
- The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- The owner or operator shall properly operate and maintain equipment to continuously monitor the pressure drop of the baghouse. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual or per a written facility-specific operation and maintenance plan.

- B. The owner or operator shall collect the pressure drop for the baghouse, in inches of H₂O, a minimum of once per 15 minutes, and record the average per 8-hour period. This requirement shall not apply on the days that the baghouse or the equipment that the baghouse controls is not in operation.
- C. Measured operating levels outside the permitted operating range will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
- D. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from response to the alarm system or to inspection/maintenance of the control equipment and the monitoring devices.
- E. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process and remain shut down until repairs are completed, or continue to operate the process while taking opacity observations (following the procedures of 40 CFR 60 Appendix A, Method 9) to ensure that the opacity does not exceed the emission limits during the time of online repair.

Authority for Requirement: DNR Construction Permit 12-A-153-P1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 124

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 2,357

Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 12-A-153-P1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: EP-83 & EP-84

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP-83	EU-83	Dry Ingredients Hopper	EC-83 Bin Vent Filters	Dry Ingredients	400 cu. ft	12-A-154-P2
EP-84	EU-84	Dry Ingredients Hopper #2	EC-84 Bin Vent Filters	Dry Ingredients	300 cu. ft	12-A-155-P3

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	12-A-154-P2; 12-A-155-P3; 567 IAC 23.3(2)"d"
	0%	12-A-154-P2; 12-A-155-P3; BACT
Particulate Matter (PM _{2.5})	0.0005 lb/hr ⁽¹⁾	12-A-154-P2; 12-A-155-P3
	0.002 gr/dscf	12-A-154-P2; 12-A-155-P3; BACT
Particulate Matter (PM ₁₀)	0.007 lb/hr ⁽¹⁾	12-A-154-P2; 12-A-155-P3
	0.004 gr/dscf	12-A-154-P2; 12-A-155-P3; BACT
Particulate Matter (PM)	0.1 gr/dscf	12-A-154-P2; 12-A-155-P3; 567 IAC 23.4(7)
	0.004 gr/dscf	12-A-154-P2; 12-A-155-P3; BACT

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications.
- B. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from response to the alarm system or to inspection/maintenance of the control equipment and the monitoring devices.
- C. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall

either perform a controlled shutdown of the process and remain shut down until repairs are completed, or continue to operate the process while taking opacity observations (following the procedures of 40 CFR 60 Appendix A, Method 9) to ensure that the opacity does not exceed the emission limits during the time of online repair.

Authority for Requirement: DNR Construction Permits 12-A-154-P2, 12-A-155-P3

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 94

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 200

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permits 12-A-154-P2, 12-A-155-P3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-85

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-85	Dry Ingredient Unload and S-Path Drag	EC-85 Dust Collector	Dry Ingredients	100,000 lb/hr, 300 cubic feet	12-A-156-P2

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	12-A-156-P2; 567 IAC 23.3(2)"d"
	0%	12-A-156-P2; BACT
Particulate Matter (PM _{2.5})	0.005 lb/hr	12-A-156-P2
	0.002 gr/dscf	12-A-156-P2; BACT
Particulate Matter (PM ₁₀)	0.068 lb/hr	12-A-156-P2
	0.004 gr/dscf	12-A-156-P2; BACT
Particulate Matter (PM)	0.1 gr/dscf	12-A-156-P2; 567 IAC 23.4(7)
	0.004 gr/dscf	12-A-156-P2; BACT

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The pressure drop for the dust collector shall be maintained between 0.1 and 8.0 inches of H₂O.
- B. An alarm shall be installed which will alert the operator whenever the pressure drop varies outside the allowable range.
- C. The owner or operator shall properly operate and maintain equipment to continuously monitor the pressure drop of the baghouse. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's

recommendations, instructions and operating manual or per a written facility-specific operation and maintenance plan.

- D. The owner or operator shall collect and the pressure drop for the baghouse, in inches of H₂O, a minimum of once per 15 minutes, and record the average per 8-hour period. This requirement shall not apply on the days that the baghouse or the equipment that the baghouse controls is not in operation.
- E. Measured operating levels outside the permitted operating range will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
- F. The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications.
- G. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from response to the alarm system or to inspection/maintenance of the control equipment and the monitoring devices.
- H. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process and remain shut down until repairs are completed, or continue to operate the process while taking opacity.

Authority for Requirement: DNR Construction Permit 12-A-156-P2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 46

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (scfm): 1,992

Exhaust Temperature (°F): 70

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 12-A-156-P2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

Visible emissions shall be observed on a daily basis to ensure there are none when the emission unit on this emission point is at or near full capacity. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process remaining shut down until repairs are completed, or continue to operate the process while taking opacity using Method 9. If an opacity >0% is observed, this would be a violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-87

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-87	Fiber Receiver	EC-87 Dust Collector	Fiber	40,000 lb/hr	12-A-157-P1

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	12-A-157-P1; 567 IAC 23.3(2)"d"
	0%	12-A-157-P1; BACT
Particulate Matter (PM _{2.5})	0.013 lb/hr ⁽¹⁾	12-A-157-P1
	0.002 gr/dscf	12-A-157-P1; BACT
Particulate Matter (PM ₁₀)	0.191 lb/hr ⁽¹⁾	12-A-157-P1
	0.004 gr/dscf	12-A-157-P1; BACT
Particulate Matter (PM)	0.1 gr/dscf	12-A-157-P1; 567 IAC 23.4(7)
	0.004 gr/dscf	12-A-157-P1; BACT

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- The pressure drop for the dust collector shall be maintained between 0.1 and 8.0 inches of H₂O.
- An alarm shall be installed which will alert the operator whenever the pressure drop varies outside the allowable range.
- The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- The owner or operator shall properly operate and maintain equipment to continuously monitor the pressure drop of the baghouse. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's

recommendations, instructions and operating manual or per a written facility-specific operation and maintenance plan.

- B. The owner or operator shall collect the pressure drop for the baghouse, in inches of H₂O, a minimum of once per 15 minutes, and record the average per 8-hour period. This requirement shall not apply on the days that the baghouse or the equipment that the baghouse controls is not in operation.
- C. Measured operating levels outside the permitted operating range will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
- D. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from response to the alarm system or to inspection/maintenance of the control equipment and the monitoring devices.
- E. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process remaining shut down until repairs are completed, or continue to operate the process while taking opacity.

Authority for Requirement: DNR Construction Permit 12-A-157-P1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 33

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 5,558

Exhaust Temperature (°F): 110

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 12-A-157-P1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

Visible emissions shall be observed on a daily basis to ensure there are none when the emission unit on this emission point is at or near full capacity. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process remaining shut down until repairs are completed, or continue to operate the process while taking opacity using Method 9. If an opacity >0% is observed, this would be a violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-88

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Monitoring Equipment	Raw Material	Rated Capacity	Construction Permit
EU-88	Natural Gas Fired Boiler	EC-88 Low NO _x Burners and Flue Gas Recirculation	ME-FB7110	Natural Gas	300 MMBtu/hr	12-A-158-P3
EU-89	Natural Gas Fired Boiler	EC-89 Low NO _x Burners and Flue Gas Recirculation		Natural Gas	300 MMBtu/hr	

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	12-A-158-P3; 567 IAC 23.3(2)"d"
	0%	12-A-158-P3; BACT
Particulate Matter (PM _{2.5})	4.56 lb/hr ⁽¹⁾	12-A-158-P3
	0.0076 lb/MMBtu ⁽²⁾	12-A-158-P3; BACT
Particulate Matter (PM ₁₀)	4.56 lb/hr ⁽¹⁾	12-A-158-P3
	0.0076 lb/MMBtu ⁽²⁾	12-A-158-P3; BACT
Particulate Matter (PM)	0.6 lb/MMBtu	12-A-158-P3; 23.3(2)"b"(3)
	0.0076 lb/MMBtu ⁽²⁾	12-A-158-P3; BACT
Sulfur Dioxide (SO ₂)	0.36 lb/hr ⁽¹⁾	12-A-158-P3
	0.0006 lb/MMBtu ⁽²⁾	12-A-158-P3; BACT
Nitrogen Oxides (NO _x)	24.0 lb/hr ⁽¹⁾	12-A-158-P3
	0.04 lb/MMBtu ⁽³⁾⁽⁴⁾	12-A-158-P3; BACT
	105.12 ton/yr ⁽⁵⁾	12-A-158-P3; BACT
	0.20 lb/MMBtu ⁽⁶⁾	12-A-158-P3; 40 CFR§60.44b(a)(1)
Volatile Organic Compounds (VOC)	0.005 lb/MMBtu ⁽²⁾	12-A-158-P3; BACT
Carbon Monoxide (CO)	48.0 lb/hr ⁽¹⁾	12-A-158-P3
	0.08 lb/MMBtu ⁽⁴⁾⁽⁷⁾	12-A-158-P3; BACT
	210.24 ton/yr ⁽⁵⁾	12-A-158-P3; BACT
Carbon Dioxide equivalents (CO _{2e})	309,618 ton/yr ⁽⁵⁾	12-A-158-P3; BACT

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}. The limit for SO₂ emissions is established to limit emissions below levels that predict exceedances of the 3-hour, 24-hour and annual NAAQS and increment for SO₂. The limit for NO_x emissions is established to limit emissions below levels that predict exceedances of the annual NAAQS and increment for NO_x. The limit for CO shows insignificant impact of the 1-hour and 8-hour NAAQS for CO.

⁽²⁾ Standard applies at all times.

⁽³⁾ Standard is expressed as a 30-day rolling average.

⁽⁴⁾ Standard applies at all times except during periods of start-up, shutdown, or malfunction.

⁽⁵⁾ The NO_x, CO and CO_{2e} ton per year standards apply at all times including during periods of startup, shutdown and malfunction.

⁽⁶⁾ The boiler is classified as a high heat release boiler. Standard applies at all times including periods of startup, shutdown and malfunction (40 CFR§60.44b(h)). Compliance is determined on a 30-day rolling average basis. (40 CFR§60.44b(i))

⁽⁷⁾ Standard is expressed as a 24-hour rolling average

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The boilers shall combust only natural gas.
- B. The owner or operator shall develop and implement a written startup, shutdown and malfunction plan (SSMP) for the boiler. The plan shall include:
 - i. Procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and
 - ii. Corrective action plans for a malfunctioning process, air pollution control, and monitoring equipment.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall maintain records of the amount of fuel combusted each day for the boilers individually, including the type of fuel according to 40 CFR §60.49b.
- B. The owner or operator shall follow the notification, recordkeeping and reporting requirements of 40 CFR §60.49b.
- C. The owner or operator shall maintain records of the following information for each steam generating unit operating day for the boiler per 40 CFR §60.49b:
 - i. Calendar date.
 - ii. The average hourly nitrogen oxides emission rates (expressed as NO₂) (ng/J or lb/million Btu heat input) measured or predicted.
 - iii. The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
 - iv. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.
 - v. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
 - vi. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
 - vii. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - viii. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

- ix. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
 - x. Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.
- D. The owner or operator shall submit excess emission reports for any excess emissions that occurred during the reporting period per 40 CFR §60.49b for the boiler.
 - E. Per 40 CFR §60.49b(r)(1), the owner or operator shall obtain and maintain at the affected facility fuel receipts from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas as defined in §60.41b and the applicable sulfur limit.
 - F. The owner or operator shall conduct a tune-up of each boiler every five years.
 - G. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment and the monitoring devices.
 - H. The owner or operator shall keep records of the most recent test results for methane (CH₄) and nitrous oxide (N₂O), and use the results of the stack tests along with the CEM data for CO₂ to calculate a rolling twelve month total CO_{2e} for EP-88. The Global Warming Potential (GWP) for methane shall be 21 and the GWP for nitrous oxide shall be 310. This calculation shall be updated monthly.

NSPS & NESHAP Applicability:

The boilers are subject to Subpart A – General Provisions (40 CFR §60.1 through 40 CFR §60.19) of the New Source Performance Standards (NSPS) and Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (40 CFR §60.40b through 40 CFR §60.49b) and also subject to the requirements of 567 IAC 23.1(2)"ccc".

These units are subject to Subpart A – General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters (40 CFR §63.7480 through 40 CFR §63.7575) as new units designed to burn gas 1.

Authority for Requirement: DNR Construction Permit 12-A-158-P3
 567 IAC 23.1(2)"ccc"
 40 CFR 60 Subpart Db
 40 CFR 63 Subpart DDDDD

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 130
 Stack Opening, (inches, dia.): 108
 Exhaust Flow Rate (scfm): 133,400 (both units operating)
 Exhaust Temperature (°F): 300
 Discharge Style: Vertical Unobstructed
 Authority for Requirement: DNR Construction Permit 12-A-158-P3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Continuous Emissions Monitoring:

Pollutant - NO_x

Operational Specifications – 40 CFR Part 60 Appendix B

Date of Initial System Calibration and Quality Assurance – July 30, 2014

Reporting & Recordkeeping - 40 CFR Part 60 Appendix B

Authority for Requirement - DNR Construction Permit 12-A-158-P3

Pollutant - CO

Operational Specifications – 40 CFR Part 60 Appendix B

Date of Initial System Calibration and Quality Assurance - July 30, 2014

Reporting & Recordkeeping - 40 CFR Part 60

Authority for Requirement - DNR Construction Permit 12-A-158-P3

Pollutant – CO₂

Operational Specifications – 40 CFR Part 60 Appendix B

Date of Initial System Calibration and Quality Assurance - July 30, 2014

Reporting & Recordkeeping - 40 CFR Part 60 Appendix B

Authority for Requirement - DNR Construction Permit 12-A-158-P3

The owner or operator shall demonstrate compliance with the nitrogen oxide emission limits for the boilers through the use of a continuous emission monitoring system (CEMS). The facility shall install, calibrate, maintain, and operate a CEMS for measuring nitrogen oxides emissions discharged from the boilers to the atmosphere. The CEM shall be installed, evaluated, operated and data collected to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2). The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

The owner or operator shall demonstrate compliance with the carbon monoxide emission limits for the boilers through the use of a continuous emission monitoring system (CEMS). Separate CEMS may be used for each boiler. The CEM shall be installed, evaluated, operated and data collected to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 (PS4). The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall

apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

The owner or operator shall demonstrate compliance with the carbon dioxide emission limits for the boilers through the use of a continuous emission monitoring system (CEMS). Separate CEMS may be used for each boiler. Therefore, the facility shall install, calibrate, maintain, and operate a CEMS for measuring CO₂ emissions discharged to the atmosphere and record the output of the system. The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 3 (PS3) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

All continuous monitoring systems (CMS) required by this permit shall be operated and data recorded during all periods of operation of the boiler except for CMS breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span adjustments.

If requested by the Department, the owner/operator shall coordinate the quarterly cylinder gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.

The procedures under 40 CFR §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-90

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-90	Dry Bran Bunker	EC-90 Bin Vent Filters	Bran	43,750 cu. ft	12-A-159-P1

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	12-A-159-P1; 567 IAC 23.3(2)"d"
	0%	12-A-159-P1; BACT
Particulate Matter (PM _{2.5})	0.004 lb/hr ⁽¹⁾	12-A-159-P1
	0.002 gr/dscf	12-A-159-P1; BACT
Particulate Matter (PM ₁₀)	0.066 lb/hr ⁽¹⁾	12-A-159-P1
	0.004 gr/dscf	12-A-159-P1; BACT
Particulate Matter (PM)	0.1 gr/dscf	12-A-159-P1; 567 IAC 23.4(7)
	0.004 gr/dscf	12-A-159-P1; BACT

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The owner or operator shall operate, inspect, and maintain the control equipment according to manufacturer's specifications.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall maintain a record of all daily checks, inspections, maintenance activities, and any actions resulting from the inspection/maintenance of the control equipment and the monitoring devices.
- B. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process and remain shut down until repairs are completed, or

continue to operate the process while taking opacity observations (following the procedures of 40 CFR 60 Appendix A, Method 9) to ensure that the opacity does not exceed the emission limits during the time of online repair.

Authority for Requirement: DNR Construction Permit 12-A-159-P1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 56

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 1,920

Exhaust Temperature (°F): 90

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 12-A-159-P1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-91

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-91	Germ Truck Loadout	EC-91 Dust Collector	Germ	150,000 lb/hr	12-A-160-P1

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	12-A-160-P1; 567 IAC 23.3(2)"d"
	0%	12-A-160-P1; BACT
Particulate Matter (PM _{2.5})	0.011 lb/hr ⁽¹⁾	12-A-160-P1
	0.002 gr/dscf	12-A-160-P1; BACT
Particulate Matter (PM ₁₀)	0.165 lb/hr ⁽¹⁾	12-A-160-P1
	0.004 gr/dscf	12-A-160-P1; BACT
Particulate Matter (PM)	0.1 gr/dscf	12-A-160-P1; 567 IAC 23.4(7)
	0.004 gr/dscf	12-A-160-P1; BACT

⁽¹⁾ The limit is established to limit emissions below levels that predict exceedances of the annual PM_{2.5} NAAQS, the 24-hour PM₁₀ and PM_{2.5} NAAQS, the 24-hour increment for PM₁₀ and PM_{2.5}, and the annual increment limit for PM₁₀ and PM_{2.5}.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- The pressure drop for the dust collector shall be maintained between 0.1 and 8.0 inches of H₂O.
- An alarm shall be installed which will alert the operator whenever the pressure drop varies outside the allowable range.
- The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- The owner or operator shall properly operate and maintain equipment to continuously monitor the pressure drop of each baghouse. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual or per a written facility-specific operation and maintenance plan.

- B. The owner or operator shall collect the pressure drop for the baghouse, in inches of H₂O, a minimum of once per 15 minutes, and record the average per 8-hour period. This requirement shall not apply on the days that the baghouse or the equipment that the baghouse controls is not in operation.
- C. Measured operating levels outside the permitted operating range will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the period of excursion. If the period of excursion continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
- D. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from response to the alarm system or to inspection/maintenance of the control equipment and the monitoring devices.
- E. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process remaining shut down until repairs are completed, or continue to operate the process while taking opacity.

Authority for Requirement: DNR Construction Permit 12-A-160-P1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 75

Stack Opening, (inches, dia.): 18

Exhaust Flow Rate (scfm): 4,800

Exhaust Temperature (°F): 110

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 12-A-160-P1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

Visible emissions shall be observed on a daily basis to ensure there are none when the emission unit on this emission point is at or near full capacity. This requirement shall not apply on the days that the equipment that the filter controls is not in

operation. If visible emissions are noted, the operator shall either perform a controlled shutdown of the process remaining shut down until repairs are completed, or continue to operate the process while taking opacity using Method 9. If an opacity >0% is observed, this would be a violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-96

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-96	Dry Ingredients Storage Bin #3	EC-96 Bin Vent Filters	Corn	200,000 lbs	15-A-328-P1

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	40%	15-A-328-P1; 567 IAC 23.3(2)"d"
	0%	15-A-328-P1; BACT
Particulate Matter (PM _{2.5})	0.005 lb/hr	15-A-328-P1
	0.002 gr/dscf	15-A-328-P1; BACT
Particulate Matter (PM ₁₀)	0.012 lb/hr	15-A-328-P1
	0.004 gr/dscf	15-A-328-P1; BACT
Particulate Matter (PM)	0.1 gr/dscf	15-A-328-P1; 567 IAC 23.4(7)
	0.004 gr/dscf	15-A-328-P1; BACT

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall operate, inspect and maintain the control equipment according to the manufacturer's specifications.
- B. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from response to the alarm system or to inspection/maintenance of the control equipment and the monitoring devices.
- C. The owner or operator shall perform a daily check of visible emissions from this emission point. This requirement shall not apply on the days that the equipment that the filter controls is not in operation. If visible emissions are noted, the operator shall either perform a

controlled shutdown of the process and remain shut down until repairs are completed, or continue to operate the process while taking opacity observations (following the procedures of 40 CFR 60 Appendix A, Method 9) to ensure that the opacity does not exceed the emission limits during the time of online repair.

Authority for Requirement: DNR Construction Permit 15-A-328-P1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 72

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 352

Exhaust Temperature (°F): 90

Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 15-A-328-P1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: FE-01

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
FE-01	Plant Haul Roads	Best Management Practices	Truck Traffic	12 hr/day	07-A-873-P4

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	No Visible Emissions ⁽¹⁾	07-A-873-P4; BACT; 567 IAC 23.3(2)"c"

⁽¹⁾ No visible emissions shall be observed beyond the lot line of the property. The owner or operator shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code Section 657.1.

Operational Limits, Requirements, & Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. All haul roads at the facility shall be paved.
- B. Corn shall be received at the facility by truck for no more than 12 hours per day, 6 days per calendar week.
 - i. The permittee shall record the hour and date of operation for all truck corn receiving.
- C. The haul road surface silt loading shall not exceed 0.4 g/m².
- D. All spills on the haul road surface shall be cleaned up as soon as possible after the spill occurs.
- E. Fugitive emissions of paved haul roads shall be controlled by either completing daily water flushing followed by vacuum sweeping or by obtaining a vacuum sweeper that can meet a minimum of 80% overall control of emissions and completing daily sweeping.
 - i. Sweeping and watering need not occur on any day that the haul road is not in use.
 - ii. Sweeping and watering need not occur when a rain gauge located at the facility indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hour time period.
 - iii. Sweeping and watering will not be required on calendar days where the daily high temperature is below 35 degrees F.
 - iv. If a facility has applied salt or sand for worker or driver safety the facility is not required to sweep or wash until the road has returned to driving conditions that no longer require the use of salt or sand.
- F. Record the frequency of cleaning performed on the haul roads. The facility shall keep a written record of any deviations from Condition E due to either suspended use of the haul road or weather conditions.

G. Record the type of cleaning (i.e. vacuum sweeping, washing, etc.) performed on the haul roads for each cleaning event.

Authority for Requirement: DNR Construction Permit 07-A-873-P4

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: FE-02

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
FE-02	Equalization Tank No. 1	Wastewater	707 sq. ft	07-A-874-P3
FE-03	Equalization Tank No. 2		2,376 sq. ft	
FE-04	Aeration Basin No. 1		14,040 sq. ft	
FE-05A	Anoxic Tank		7,740 sq. ft	
FE-05B	Post Anoxic Tank		4,385 sq. ft	
FE-05C	Open Channel		300 sq. ft	
FE-05D	Membrane Tank No. 1		365 sq. ft	
FE-05E	Membrane Tank No. 2		365 sq. ft	
FE-05F	Membrane Tank No. 3		365 sq. ft	
FE-06	Clarifier		5,675 sq. ft	

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Opacity	No Visible Emissions ⁽¹⁾	07-A-874-P3; BACT
Volatile Organic Compounds (VOC)	6.62 lb/hr ⁽²⁾	07-A-874-P3; BACT

⁽¹⁾ No visible emissions shall be observed beyond the lot line of the property.

⁽²⁾ The short-term BACT limit is established under Project No. 16-296 and it is based on the upper limit of the 95% confidence interval around the mean of the VOC emissions obtained during the monthly sampling from July 2015 through June 2016.

Operational Limits, Requirements, & Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall operate the Wastewater Treatment Plant (EU FE-02 through EU FE-06) so as to prevent, control, or minimize particulate and VOC uncaptured emissions.
 - i. The owner or operator shall develop and follow a Best Work Practices (BWP) guidance document describing methods; technology; procedures for equipment inspection and maintenance; and the action steps necessary to minimize the impact of plant upsets at Plant No. 94-01-080 on the operation of the Wastewater Treatment Plant (EU FE-02 through EU FE-06).
 1. The BWP guidance document shall be made available to Department personnel upon request.

- ii. The owner or operator shall keep records of all inspection and maintenance activities performed on the equipment associated with the Wastewater Treatment Plant (EU FE-02 through EU FE-06). At a minimum, these records shall include the following:
 1. The date that any inspection and/or maintenance was performed on the equipment;
 2. Any issues identified during inspection;
 3. Any issues addressed during the maintenance activities and the date each issue was resolved; and
 4. Identification of the staff member performing the maintenance or inspection.
- iii. The owner or operator shall keep records of plant upsets at Plant No. 94-01-080 that have the potential to impact the operation of the Wastewater Treatment Plant (EU FE-02 through EU FE-06). At a minimum, these records shall include the following:
 1. The date when a plant upset at Plant No. 94-01-080 takes place;
 2. The description of the plant upset at Plant No. 94-01-080;
 3. A description of any impact(s) on the operation of the Wastewater Treatment Plant (EU FE-02 through EU FE-06);
 4. A description of how the plant upset at Plant No. 94-01-080 was addressed; and
 5. The date the plant upset at Plant No. 94-01-080 was resolved.

Authority for Requirement: DNR Construction Permit 07-A-874-P3

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: FE-08

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
FE-08	Ethanol Operations Fugitives	LDAR	Ethanol	8,760 hr/yr	07-A-872-P2

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant	Limit	Authority for Requirement
Volatile Organic Compounds (VOC)	See note 1	07-A-872-P2; BACT

⁽¹⁾ Standard is a work practice standard based on the Leak Detection and Repair (LDAR) system. See Operational Limits & Requirements below for details.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The owner or operator shall document the component count as to the number and types of components used. Components include, but are not limited to, valves, pumps, compressor seals, flanges, etc. Equipment subject to the regulations in NSPS Subpart VVa and NESHAP Subpart FFFF shall be identified. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, by designation of process unit or affected.
- B. The owner or operator shall follow the standards of NSPS Subpart VVa (40 CFR §60.480a through 60.489a).
- C. The owner or operator shall follow the standards of NESHAP Subpart FFFF (40 CFR §63.2430 through §63.2550).

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall calculate and record the VOC emissions due to the documented component count. Emission factors shall be based on EPA document 453/R-95-017 titled Protocol for Equipment Leak Emission Estimates. The facility shall use the following methodology in the calculations:
 - i. Determine the component count. This count shall be updated with each modification.

- ii. On a monthly basis, take a minimum of five samples of liquid from five different locations within each section of the plant (ie, fermentation, distillation, storage tanks, etc) and determine the organic content of each sample. If 100% organic content is assumed, monthly sampling is not required. The average organic content of the streams in each section shall be determined and used in the VOC emission calculation. If after one year of sampling, the average of each month's samples shows less than a 2% variation over the twelve months, the average of the 60 samples may be used in future calculations and the sampling may be ended. The VOC content sampling shall be completed by following the procedures in 40 CFR §60.485(d).
- iii. From each month's leak detection tracking information, determine the following for each component type:
 - 1. The fraction of sources that were repaired the previous month that were found to be leaking this month.
 - 2. The fraction of sources that were successfully repaired after being found to be leaking in the previous month's monitoring.
 - 3. The fraction of sources that were found to be not leaking during the previous month's monitoring, which were found to be leaking during this month's monitoring.
- iv. Using the information collected in Condition A.iii. above, determine the control efficiency of the leak detection and repair program as outlined in EPA document 453/R-95-017 titled Protocol for Equipment Leak Emission Estimates (pages 5-54 through 5-57). Control efficiencies listed in table 5.2 (page 5-9) may be assumed for those components listed. If these control efficiencies are assumed, the information required by Condition A.iii. above need not be recorded for that component type.
- v. Using the information collected above, determine the VOC emissions over the previous month from each section of the facility using the calculation methods outlined in EPA document 453/R-95-017 titled Protocol for Equipment Leak Emission Estimates (page 2-11).
- B. At the end of each month, record the total VOC emissions from these components over the previous month from this facility by adding the emissions totals for each section. Calculate and record the 12-month rolling totals.
- C. The owner or operator shall keep records as required in 40 CFR §60.486a, and reports as required in 40 CFR §60.487a for purposes of BACT.
- D. The owner or operator shall keep records as required in 40 CFR §63.2520, and reports as required in 40 CFR §63.2525.

NSPS & NESHAP Applicability:

Some of the emission units at the plant are subject to the New Source Performance Standard (NSPS) - 40 CFR Part 60, Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.

These emission units are subject to 40 CFR Subpart 63 Subpart A – General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants

(NESHAP) and Subpart FFFF –National Emission Standards for Hazardous Air Pollutant: Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550).

Authority for Requirement: DNR Construction Permit 07-A-872-P2
567 IAC 23.1(2)"nn"
40 CFR 60 Subpart VVa
567 IAC 23.1(4)"cf"
40 CFR 63 Subpart FFFF

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 22.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permitting & Standards Branch, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field Office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.

6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department

within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of

performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));.
- e. The changes comply with all applicable requirements.
- f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 22.110(1)

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), Recordkeeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that does any of the following:

- i. Correct typographical errors
- ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- iii. Require more frequent monitoring or reporting by the permittee; or
- iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:

- i. Do not violate any applicable requirement;
- ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
- iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
- iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
- v. Are not modifications under any provision of Title I of the Act; and
- vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).

- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
- i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
 - ii. The permittee's suggested draft permit;
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
 - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
- c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.111-567 IAC 22.113

G19. Duty to Obtain Construction Permits

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. 567 IAC 22.1(1)

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (567 IAC 23.1(3)"a"); training fires and controlled burning of a demolished building (567 IAC 23.2).

G21. Open Burning

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 *except 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air

conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the

permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

a. Such applicable requirements are included and are specifically identified in the permit; or

b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;

d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of *567 IAC 22.111(1)*. *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-9526

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Iowa Compliance Officer
Air Branch
Enforcement and Compliance Assurance Division
U.S. EPA Region 7
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-8200

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2

2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5

Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-0268

Field Office 6

1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Polk County Public Works Dept.

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health

Air Quality Branch
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

V. Appendix A – Web Reference Links

NESHAP Subpart B – Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Section 112(g) and 112(j)

- <http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.10.63.b>

NESHAP Subpart FFFF – Miscellaneous Organic Chemical Manufacturing

- <http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.13.63.ffff>

NESHAP Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters

- <http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.14.63.ddddd>

NESHAP ZZZZ – Stationary Reciprocating Internal Combustion Engines

- <http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.14.63.zzzz>

NSPS Db – Industrial-Commercial-Institutional Steam Generating Units

- http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.d_0b

NSPS Dc – Small Industrial-Commercial-Institutional Steam Generating Units

- http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.d_0c

NSPS DD – Grain Elevators

- <http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.dd>

NSPS Kb – Volatile Organic Liquid Storage Vessels

- http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.k_0b

NSPS VVa – Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

- http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.vv_0a

NSPS IIII – Stationary Compression Ignition Internal Combustion Engines

- <http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.iiii>